ORDER NO. MKE0303601C1
B6, B22

TV/DVD Combination

PV-20D53 / PV-27D53

SPECIFICATIONS

ITEM		SPECIFICATION	1	2
GENERAL	Power	Source: 120 V AC±12 V AC, 60 Hz±3 Hz	○	○
		Consumption: Approx. 122 W (Power on), Approx. 3.5 W (Power off)	○	–
		Consumption: Approx. 150 W (Power on), Approx. 3.5 W (Power off)	–	○
	Television System	EIA Standard (525 lines, 60 fields) NTSC Color Signal	○	○
	Operating Condition	5 °C-35 °C (41 °F-95 °F) (Temperature) 10 %-75 % (Humidity)	○	○
	Dimensions (W x H x D)	515 mm x 505 mm x 474 mm (20-5/16 inch x 19-7/8 inch x 18-11/16 inch)	○	–
		688 mm x 653 mm x 550 mm (27-1/16 inch x 25-11/16 inch x 21-11/16 inch)	–	○
	Weight	23 kg (50.6 lbs.)	○	–
		39 kg (85.8 lbs.)	–	○
TUNER	Broadcast Channels	VHF 2~13, UHF 14~69	○	○
	CABLE Channels	Midband A through I (14~22) Superband J through W (23~36) Hyperband AA~EEE (37~64) Lowband A-5~A-1 (95~99) Special CABLE channel 5A (01) Ultraband 65~94, 100~125	○	○

ITEM		SPECIFICATION	1	2
DISPLAY	Picture Tube	20 inch measured diagonal 90° deflection Picture Tube	○	–
		25 inch measured diagonal 100° deflection Picture Tube	–	○
FM Radio	Band Range	87.5 MHz-108.1 MHz	○	○
DVD	Discs Played	(1) DVD disc(DVD-Video, DVD-R): 12 cm (5 inch) single-sided, single-layer 12 cm (5 inch) single-sided, double-layer 12 cm (5 inch) double-sided, double-layer (one layer per side) 8 cm (3 inch) single-sided, single-layer 8 cm (3 inch) single-sided, double-layer 8 cm (3 inch) double-sided, double-layer (one layer per side) (2) Compact disc(CD-DA, VIDEO CD, CD-R, CD-RW): 12 cm (5 inch) disc, 8 cm (3 inch) disc	○	○
	Digital Audio Output	Optical digital output: Optical connector	○	○
	Pickup	Wave length: 655 nm (DVD), 790nm (Video CD/CD) Laser power: CLASS II	○	○
	Solder	This model uses lead free solder (PbF).	○	○

1. PV-20D53
2. PV-27D53

Weight and dimensions shown are approximate.
Designs and specifications are subject to change without notice.

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Panasonic®

1. SAFETY PRECAUTIONS

1.1. GENERAL GUIDELINES

1. IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Circuit Board Layout, Exploded Views and Replacement Parts List. It is essential thatthese critical parts should be replaced with manufacturer's specified parts to prevent X-RADIATION, shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

2. **An Isolation Transformer should always be used during the servicing of Combination TV/DVD whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidentsresulting in personal injury from electrical shocks. It will also protect Combination TV/DVD from being damaged by accidental shorting that may occur during servicing.**
3. **When servicing, observe the original lead dress, especially the lead dress in the high voltage circuits. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.**
4. **After servicing, see to it that all the protective devices such as insulation barriers, insulation papers, shield, and isolation R-C combinations are properly installed.**
5. **Before turning the receiver on, measure the resistance between B+ line and chassis ground. Connect (-) side of an ohmmeter to the B + lines, and (+) side to chassis ground. Each line should have more resistance than specified,as follows :**

B+ Line
Minimum Resistance

130 V
110 Ω (Cold chassis ground)

28 V
180 Ω (Cold chassis ground)

220 V
1 k Ω (Cold chassis ground)

6. **When the TV set is not used for a long period of time, unplug the**

power cord from the AC outlet.

7. Potentials, as high as 32.0 kV are present when this TV set is in operation. Operation of the TV set without the rear cover involves the danger of a shock hazard from the TV set power supply. Servicing should not be attempted by anyone who isnot thoroughly familiar with the precautions necessary when working on high voltage equipment. Always discharge the anode of the picture tube to the CRT ground of receiver before handling the tube.
8. After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.2. LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. For physically operated power switches, turn power on. Otherwise skip step 2.
3. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the receiver, such as screwheads, connectors, etc. When the exposed metallic part has a return path to the chassis, the readingshould be between 1 M Ω and 12 M Ω . When the exposed metal does not have a return path to the chassis, the reading must be infinity.

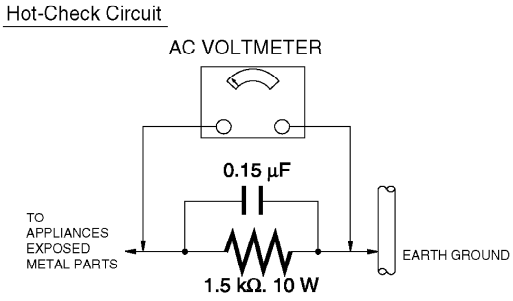
1.3. LEAKAGE CURRENT HOT CHECK

1. Plug the AC cord directly into the AC outlet.
   Do not use a isolation transformer for this check.
2. Connect a 1.5 k Ω , 10 W resistor, in parallel with a 0.15 μ F capacitor, between each exposed metallic part on the set and a good earth ground, as shown in Figure 1.
3. Use an AC voltmeter, with 1 k Ω /V or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above

measurements.

6. The potential at any point should not exceed 0.75 V RMS.
   A leakage current tester (Simpson Model 229 equivalent) may be used to make the hot checks. Leakage current must not exceed 1/ 2 mA. In case a measurement is outside of the limits specified, there is a possibility of shock hazard, and thereceiver should be repaired and rechecked before it is returned to the customer.

Figure 1



2. X-RADIATION

WARNING :

1. The potential source of X-Radiation in TV sets is the High Voltage section and the picture tube.
2. When using a picture tube test fixture for service, ensure that the fixture is capable of handling 32.0 kV without causing X-Radiation.

NOTE:

It is important to use an accurate periodically calibrated high voltage meter.

1. Reduce the brightness to minimum.
2. Set the SERVICE switch to SERVICE .
3. Measure the High Voltage. The meter reading should indicate 30.0 kV±2.0 kV.
   If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.
4. To prevent an X-Radiation possibly, it is essential to use the specified picture tube.

2.1. HORIZONTAL OSCILLATOR DISABLE CIRCUIT TEST

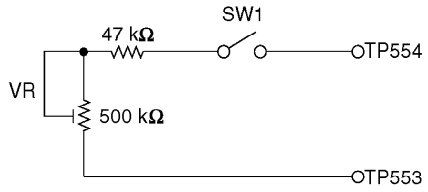
SERVICE WARNING :

The test must be made as a final check before set is returned to the customer.

CONFIRMATION OF X-RAY MOVEMENT

1. **Turn off TV set.**
2. **Connect the circuit below between TP553 and TP554 on the Main C.B.A.**

Figure 2



3. **Turn on SW1 and then turn on the set. Confirm that the picture is on the screen properly.**
4. **Confirm that the picture goes out of horizontal sync while getting down by varying VR.**
5. **If this does not occur, it means that X-ray protect circuit is not operating. Further confirmation and repair is required.**

2.2. REPAIR PROCEDURES OF HORIZONTAL OSCILLATOR DISABLE CIRCUIT

1. **Connect a DC voltmeter between capacitor C513 (+) on the Main circuit board and chassis ground.**
2. **If approximately +21.5 V is not present at that point when 120 V AC is applied, find the cause. Check R508, R503, R5505, C5507, C513 and D503.**
3. **Carefully check above specified parts and related circuits and parts. When the circuit is repaired, try the horizontal oscillator disable circuit test again.**

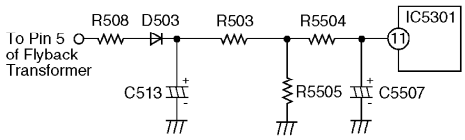
2.3. CIRCUIT EXPLANATION

2.3.1. HORIZONTAL OSCILLATOR DISABLE CIRCUIT

The positive DC voltage, supplied from the D503 cathode for monitoring high voltage, is applied to the IC5301 Pin 11 through R508 and R5504. Under normal conditions, the voltage at IC5301 Pin 11 is less than approx. 6 V. If the high voltage at FlybackTransformer Pin 5 exceeds the specified voltage, the positive DC voltage which is supplied from the D503 cathode also increases. The increased voltage is applied to IC5301 Pin 11 through R503 and R5504. Due to the increased voltage at IC5301 Pin 11,the horizontal oscillator frequency increases, the picture

goes out of horizontal sync, the beam current decreases and the picture become dark in order to keep X-radiation under specification.

Figure 3



2.4. LASER PRODUCT

CLASS I LASER PRODUCT

- This equipment is certified to comply with DHHS Rules 21 CFR Chapter 1, Subchapter J in effect as of date of manufacture. (Only for U.S.A.)

This equipment is classified as a Class I (Class 1) level LASER Product and there is no hazardous LASER radiation with the safety protection.

Caution:

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Never touch the internal parts in order to avoid EXPOSURE TO VISIBLE LASER RADIATION.
Unplug the AC power cord to the equipment when opening the top cover.
When the power switch is On, do not place your eyes close to the front panel opening door or the other openings to look into the interior unit.
LASER Specification
Class I level A LASER Product (Class 1 level A LASER Product)

Wave Length:

647 - 677 nm (at DVD)
775 - 815 nm (at CD)

Laser Power:

No hazardous radiation is emitted with the safety protection.

2.5. PRECAUTION OF LASER DIODE

CAUTION:

This unit utilizes a class III a laser. Visible laser radiation is emitted from the optical pickup lens when the unit is turned on:

1. Do not look directly into the pickup lens.

2. Do not use optical instruments to look at the pickup lens.

3. Do not adjust the preset variable resistor on the optical pickup.

4. Do not disassemble the optical pickup unit.

5. **If the optical pickup is replaced, use the manufactures specified replacement pickup only.**
6. **Use of control or adjustment or performance of procedures other than those specified herein may result in hazardous radiation exposure.**

3. PREVENTION OF ELECTROSTATIC DISCHARGE (ESD) TO ELECTROSTATICALLY SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistorsare semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electrostatic discharge (ESD).

1. **Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, whichshould be removed for potential shock reasons prior to applying power to the unit under test.**
2. **After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.**
3. **Use only a grounded-tip soldering iron to solder or unsolder ES devices.**
4. **Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.**
5. **Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.**
6. **Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or**

comparableconductive material).

7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   CAUTION:

   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD)sufficient to damage an ES device).

"NOTE to CATV system installer :

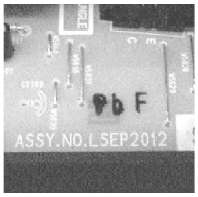
This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding systemof the building, as close to the point of cable entry as practical."

4. ABOUT LEAD FREE SOLDER (PbF)

Distinction of PbF PCB:

PCBs (manufactured) using lead free solder will have a PbF stamp or printing on the PCB.
(Please refer to figures.)

Printed case



Stamped case

CAUTION:

- Pb free solder has a higher melting point than standard solder;
  Typically the melting point is 50 °F - 70 °F (30 °C - 40 °C) higher.
  Please use a soldering iron with temperature control and adjust it to 700 °F±20 °F (370 °C± 10 °C).
  In case of using high temperature soldering iron, please be carefull not to heat too long.
- Pb free solder will tend to splash when heated too high (about 1100 °F/600 °C).
- All products with the printed circuit board with PbF stamp or printing must be serviced with lead free solder.
  When soldering or unsoldering, completely remove all of the solder from the pins or solder area,
  and be sure to heat the soldering points with the lead free solder until it melts sufficiently.

Recommendations

Recommended lead free solder composition is Sn96.5 Ag3.0 Cu0.5.

5. SERVICE NOTES (PLEASE READ)

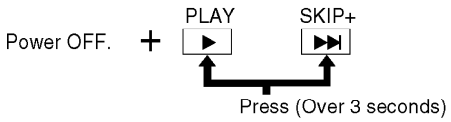
5.1. SERVICE NOTES

5.1.1. SIMPLIFIED FAULT FINDING DATA

Simplified Self-Diagnostic System facilitates finding the cause of the fault. Communication for I2C bus code will be displayed on TV screen.
The Simplified Fault finding data is stored in the Memory IC (IC6004). This data is cleared after it is displayed, and then the POWER button is pressed back on.

1. With power turned off, press PLAY and SKIP+ buttons on the unit together for over 3 seconds.

Fig. 1-1



2. TV power comes on and the unit goes into service mode. Communication for I^2C bus code will be displayed.

Fig. 1-2

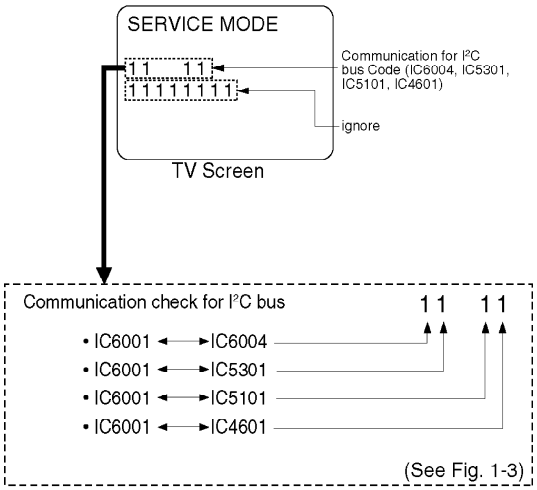


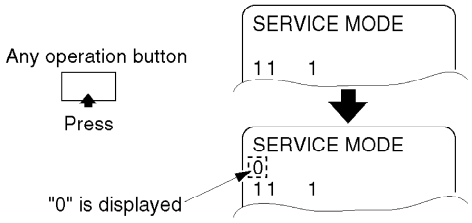
Fig. 1-3

(Communication check for I²C bus)

Explanation of Codes	Code No.					
Communication check for I²C bus (IC6001◄►IC6004) ----- **NG** / **OK**	0 1					
Communication check for I²C bus (IC6001◄►IC5301) ----- **NG** / **OK**		0 1				
Communication check for I²C bus (IC6001◄►IC5101) ----- **NG** / **OK**					0 1	
Communication check for I²C bus (IC6001◄►IC4601) ----- **NG** / **OK**						0 1

3. Press any operation button except for POWER, CH UP, CH DOWN, LIGHT or DSS CABLE buttons on either the unit, or the remote to detect that a key has been pressed. "0" will be displayed only when key is detected.

Fig. 1-4



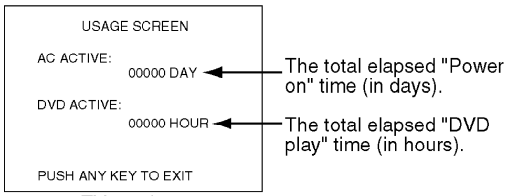
5.1.2. USAGE SCREEN MODE

This function is displayed on the TV monitor:

- the total elapsed "Power on" time (in days)
- the total elapsed "DVD play" time (in hours).

1. **With power turned, press STOP button of operation panel on the unit and 7 key on the remote together.**
   The USAGE SCREEN will be displayed on the TV Monitor of the unit.

Fig. 3



<TV monitor>

Note:

1. **After replacing the DVD Unit, press ADD/DLT button on remote in this mode. Only Total elapsed time "DVD Play" time (in hours) will be cleared to 0.**
2. **To release from Usage Screen Mode, press any operation button or insert a cassette tape in this mode. The unit will return to normal operation mode.**

5.1.3. GROUNDING FOR ELECTROSTATIC BREAKDOWN

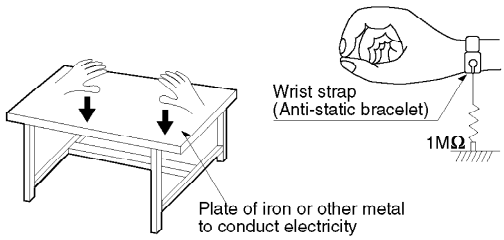
Prevention

1. **Human body grounding**
   Use the antistatic wrist strap to discharge the static electricity from your body.
2. **Work table grounding**
   Put a conductive material (sheet) or steel sheet on the area where the optical pickup is placed and ground the sheet.

Caution:

The static electricity of your clothes will not be grounded through the wrist strap. So take care not to let your clothes touch the optical pickup.

Fig. 4

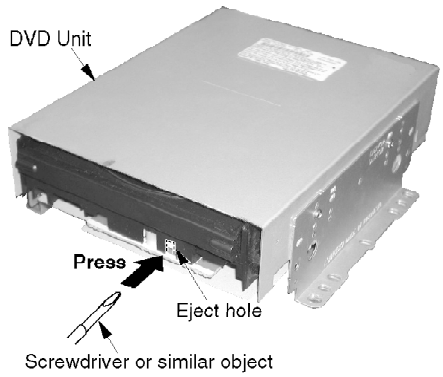


5.1.4. METHOD FOR EJECTING THE DVD TRAY MANUALLY

1. Insert a Screwdriver or similar object into the Eject hole.

2. Press it gently, and then pull the Tray fully out.

Fig. 5



5.1.5. SERVICE POSITION

5.1.5.1. Service Position

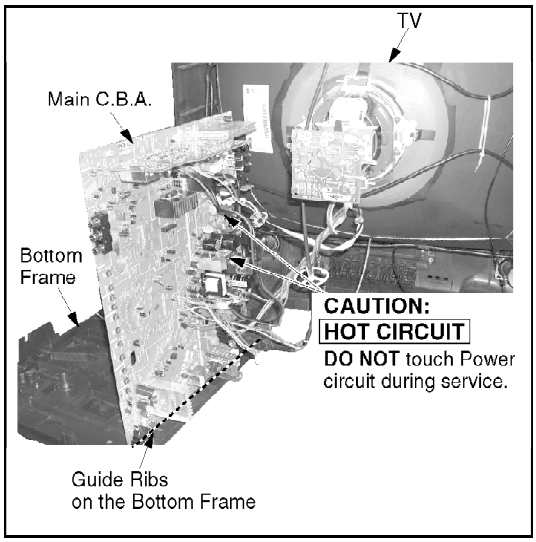
Service Position	Purpose
Service Position (1)	Electrical adjustment Main C.B.A. check
Service Position (2)	DVD Main C.B.A. check

CAUTION:

HOT CIRCUIT (Primary circuit) exists on the Main C.B.A.
Use extreme care to prevent accidental shock when servicing.

5.1.5.1.1. Service Position (1)

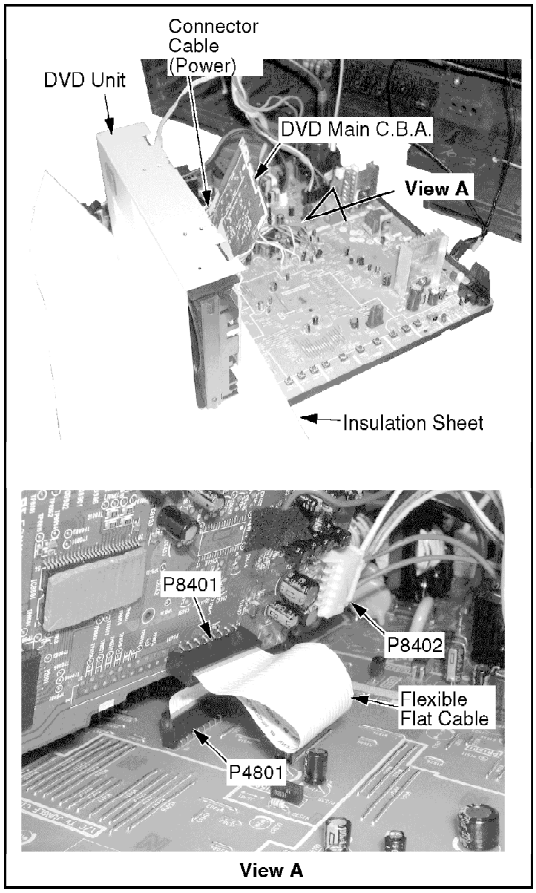
Fig. 6-1



5.1.5.1.2. Service Position (2)

In Service Position (2), the DVD Main C.B.A. without Extension Cables can be performed.

Fig. 6-2



5.1.6. HOT CIRCUIT

Primary circuit exists on the Main C.B.A.

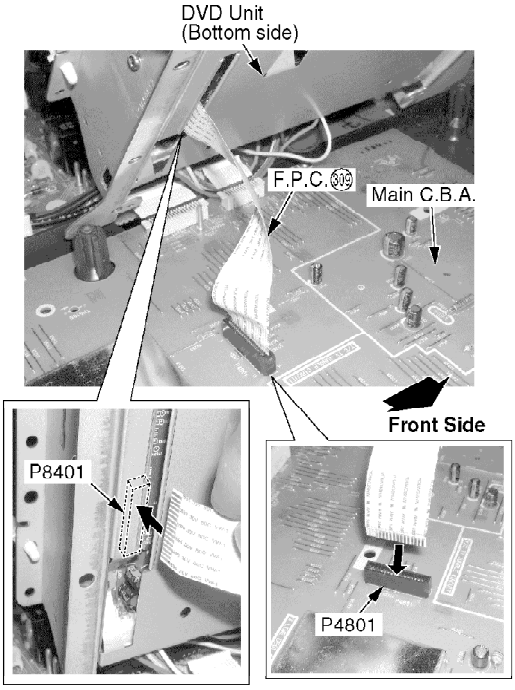
This circuit is identified as " HOT " on the C.B.A. and in the Service Manual. Use extreme care to prevent accidental shock when servicing.

5.1.7. F.P.C. CONNECTION NOTE

5.1.7.1. F.P.C. between the DVD Unit (DVD Main C.B.A.) and the Main C.B.A.

Be careful with the direction of F.P.C. to connector as shown.

Fig. 7



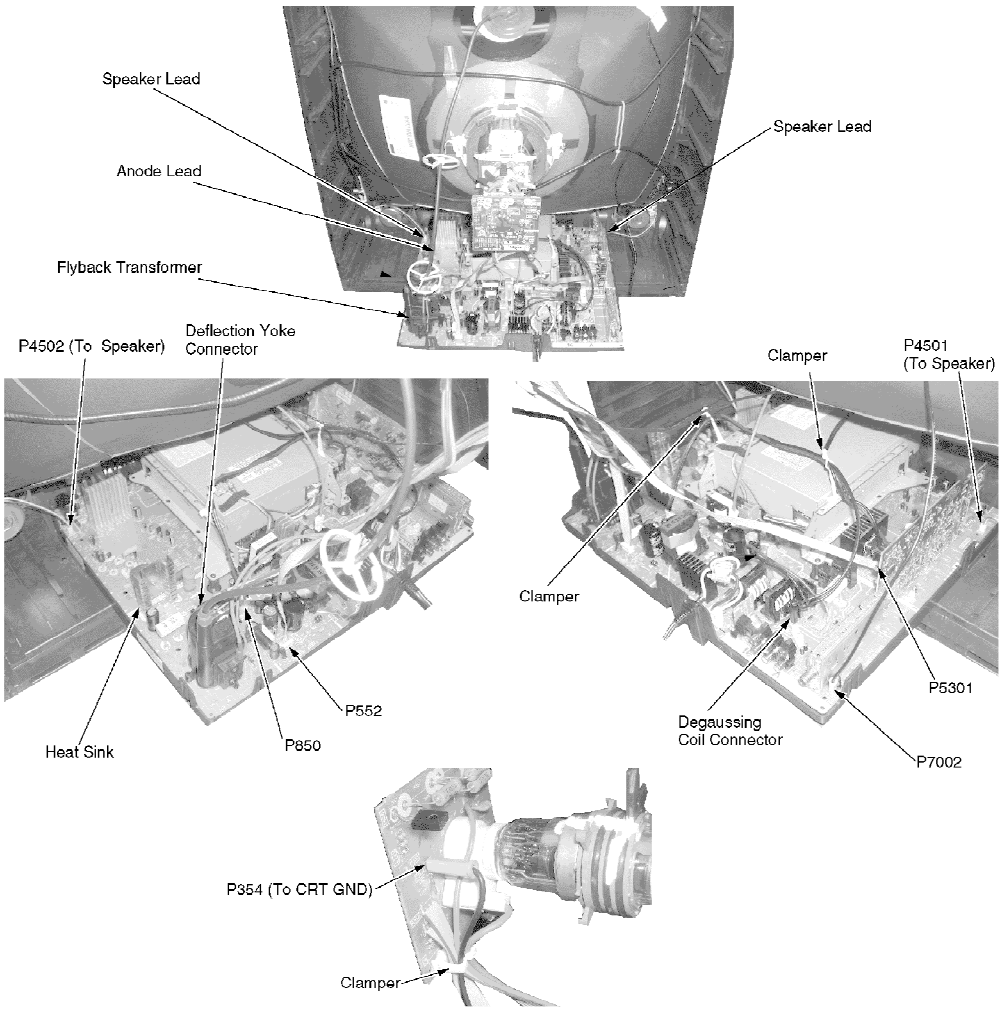
5.1.8. WIRE AND LEAD POSITION DIAGRAM

Fig. 8

After servicing, make sure that all wires, leads, and clampers are placed in their original position. It is important for the best operation of the unit.

Note:
No lead wires or flat cables should touch any heating parts or the Heat Sink Plate.
Use extreme care especially for followings.

(PV-27D53 as shown)



5.1.9. HOW TO RESET ALL COMBINATION TV/DVD MEMORY FUNCTIONS

To reset (clear) the select language, channel auto set and set clock functions to their initial power on condition, hold down the PLAY and SKIP- buttons of operation panel on the unit together for more than 5 seconds.
Power will shut off.

5.1.10. HOW TO CONFIRM AUTO CLOCK SET FEATURE

1. **Connect an RF cable from the output of one unit to the input of the test unit.**
2. **Select corresponding RF channels.**
3. **Playback a recording of P.B.S. channel including clock set data and confirm this feature.**

5.1.11. VARIABLE VOLTAGE ISOLATION TRANSFORMER

An Isolation Transformer should always be used during the servicing of Combination TV/DVD whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resultingin personal injury from electrical shocks. It will also protect Combination TV/DVD from being damaged by accidental shorting that may occur during servicing.
Also, when troubleshooting the above type of Power Supply Circuit, a variable isolation transformer is required in order to increase the input voltage slowly.

5.1.12. SPECIAL NOTE

All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "ELECTROSTATICALLY SENSITIVE (ES) DEVICES" section of this service manual.

5.1.13. MODEL NO. IDENTIFICATION MARK

Use Marks shown in the chart below to distinguish the different models included in this Service Manual.

MODEL	MARK
PV-20D53	A
PV-27D53	B
Not Used	PT

Note:
Refer to Item 3 of Schematic Diagram Notes of Schematic Diagram and Circuit Board Layout Notes, for mark "PT."

6. DISASSEMBLY/ASSEMBLY PROCEDURES

6.1. CABINET SECTION

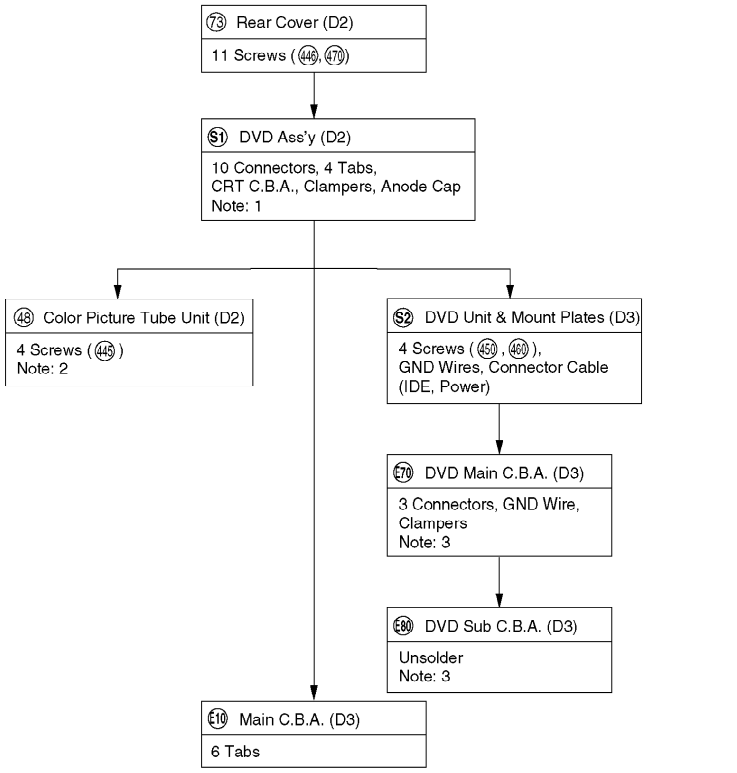
6.1.1. Disassembly Flowchart

Perform all disassembly procedures in the order described in the "Disassembly Flowchart" shown below. When reassembling, use the reverse procedure.

CAUTION:

Disconnect AC plug before disassembly.

Fig. D1



A: Ref No.
B: Part to be removed or installed.
C: Fig No.
D: Identification of part to be removed, unlocked, released, unplugged or unsoldered.
Note: Refer to "Notes in chart."

Fig. D2

Note: Parts with no Ref. No. in "EXPLODED VIEWS" are not supplied. And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.

IMPORTANT SAFETY NOTICE

COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-20D53	A
PV-27D53	B

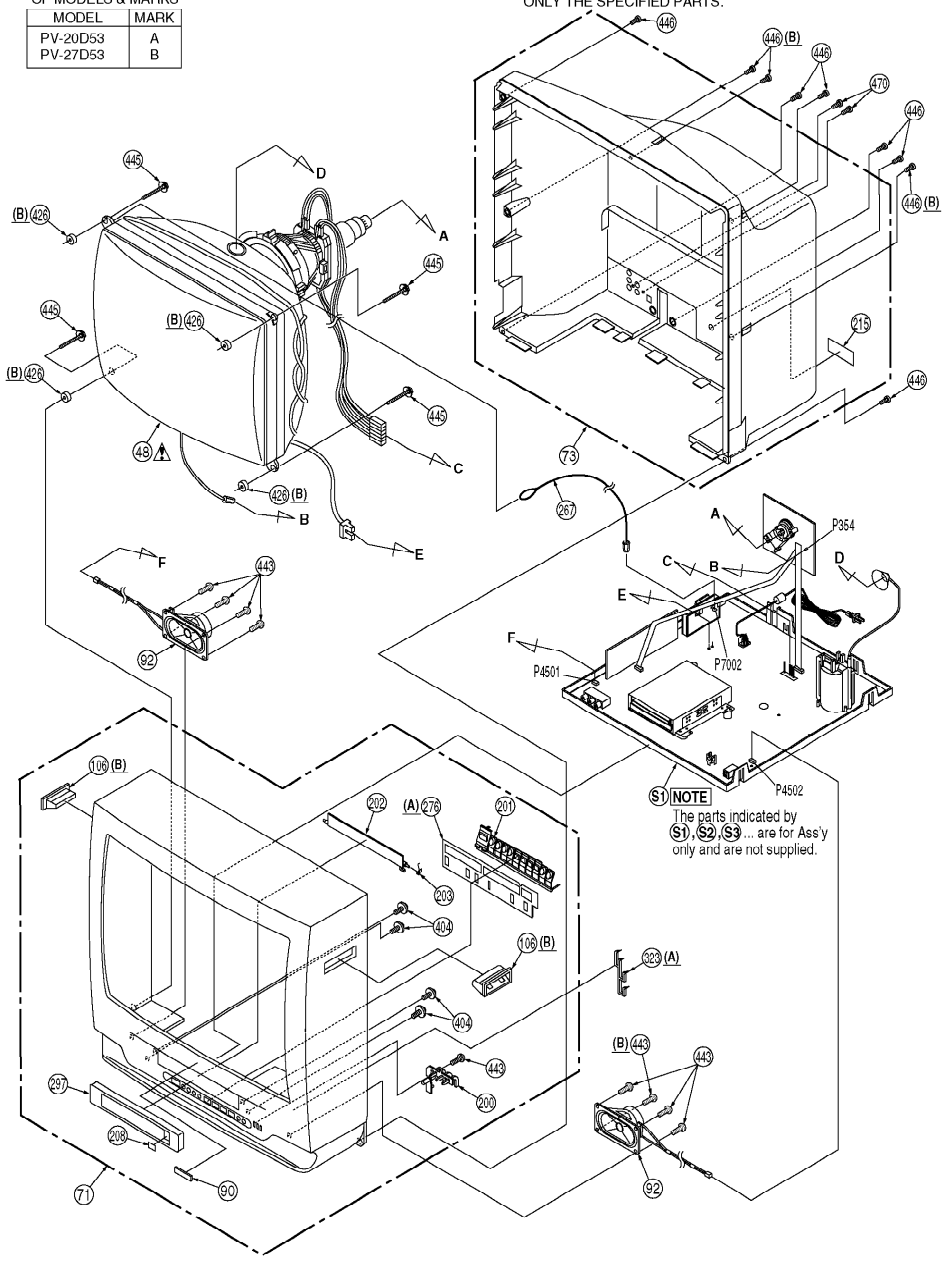
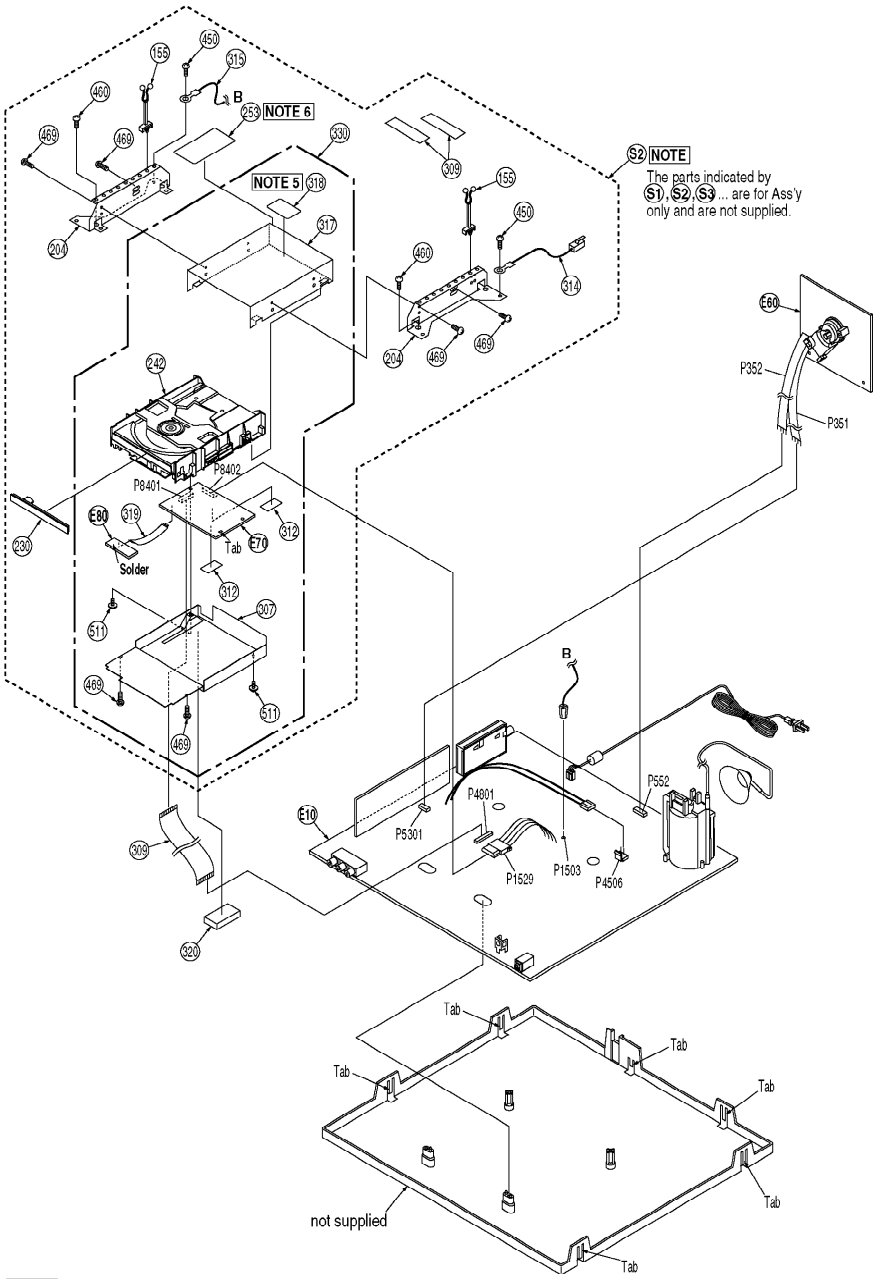


Fig. D3

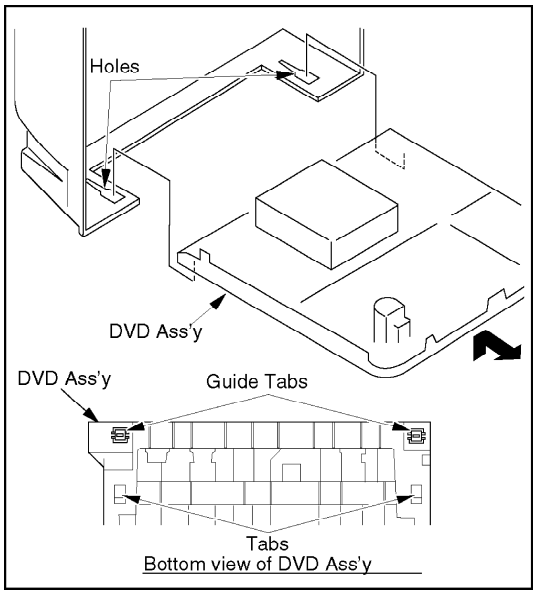


NOTE 5: When replacing the DVD Frame (Ref. No. 317), be sure to place the Rating Label (Ref. No. 318) on it.
NOTE 6: When replacing the DVD Unit (Ref. No. 242), be sure to place the Cabinet Label (Ref. No. 253) on it.

6.1.1.1. Notes in chart

1. Removal of DVD Ass'y

Fig. D4



2. Removal of Color Picture Tube Unit

Place the Unit face down on a soft cloth before removing the Color Picture Tube Unit.

3. Removal of DVD Sub C.B.A.

A. Remove solder portions "a," "b," and "c" on the DVD Sub C.B.A.

B. Remove the DVD Sub C.B.A. while releasing the Locking Tab.

Installation of DVD Main C.B.A. and DVD Sub C.B.A.

A. Confirm that the Lever A is positioned as shown, and install the DVD Sub C.B.A. with the Locking Tab and 2 bosses.

B. Install the DVD Main C.B.A. with the Locking Tab and the rib.

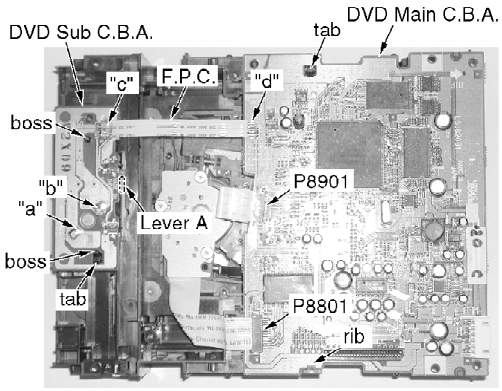
C. Solder portions "a," "b," "c" and "d" on the DVD Sub C.B.A.

Note:

Solder portions "a" and "b" while pushing down the DVD Sub C.B.A. securely.

D. Connect the F.P.C.s to Connectors P8901, P8801 on the DVD Main C.B.A.

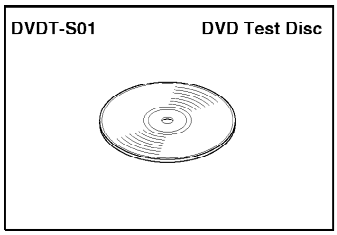
Fig. D5



<Bottom View>

7. ADJUSTMENT PROCEDURES

7.1. SERVICE FIXTURES AND TOOLS



7.2. ELECTRICAL ADJUSTMENT

NOTE:

Following Adjustments have been preadjusted at factory and are not required.

- **Purity Adjustment**
- **Static Central Convergence Adjustment**
- **Dynamic Convergence Adjustment**

7.2.1. TEST EQUIPMENT

To do all of these electrical adjustments, the following equipment is required.

1. **Dual-Trace Oscilloscope**
   Voltage Range: 0.001 V to 50 V/Div.
   Frequency Range: DC to 50 MHz
   Probes: 10:1, 1:1
2. **NTSC Video Pattern Generator**
3. **DVM (Digital Volt Meter)**
4. **MTS/SAP Signal Generator**
   (TV Multi-Channel Sound Modulator (U.S.A.))
5. **Plastic Tip Driver and Non-Metal Driver**
6. **Isolation Transformer (Variable)**

7. Degaussing Coil

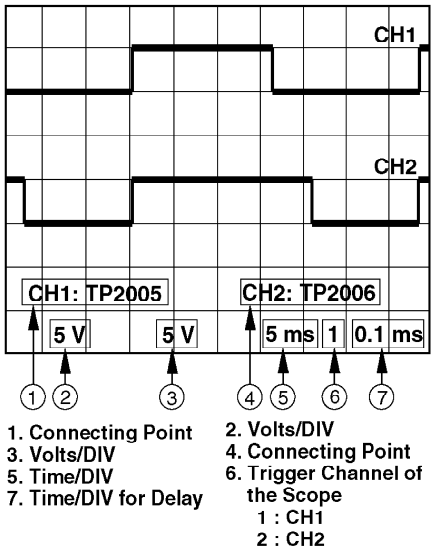
8. White Pattern Generator

9. Audio Generator

10. DVD Test Disc

7.2.2. HOW TO READ THE ADJUSTMENT PROCEDURES

Fig. E1



7.2.3. FM VCO ADJUSTMENT

Note:

Remove the DVD unit before performing this adjustment.

Purpose:

To set VCO free run frequency.

Symptom of Misadjustment:

Even when stereophony is received, only monaural sound will be output.

Test Point :

Pin 41 of P4209, TP9201 (Audio C.B.A.)

Adjustment :

R9206 (Audio C.B.A.)

Specification :

38.0 kHz±50 Hz

INPUT :

Mode :

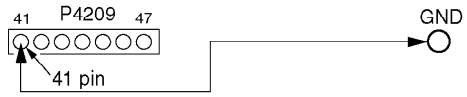
STEREO audio (FM Radio)

Equipment :

Frequency Counter

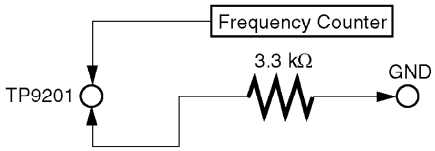
1. Connect Pin 41 of P4209 on Audio C.B.A. to GND.

Fig. E2-1



2. Connect TP9201 on Audio C.B.A. to GND through a resistor (3.3 k Ω). Then, connect Frequency Counter to TP9201.

Fig. E2-2



3. Adjust R9206 (FM VCO) so that the frequency is 38.0 kHz ±50 Hz.

7.2.4. DVD LUMINANCE LEVEL ADJUSTMENT

Purpose:

To set the optimum luminance level for DVD.

Symptom of Misadjustment:

The picture is too bright or too dark.

Test Point:

TP8406 (DVD Main C.B.A.)

Adjustment:

R8044 (DVD Main C.B.A.)

Specification:

1.0 V[P-P]±0.05 V[P-P]

Input:

Mode:

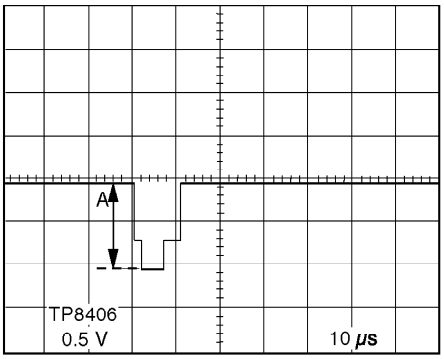
DVD PLAY

Equipment:

Oscilloscope, DVD Test Disc

1. **Playback 100% Flat Field on the DVD Test Disc in DVD PLAY Mode.**
2. **Connect the Oscilloscope to TP8406 on the DVD Main C.B.A. and GND (TP8521 on the DVD Main C.B.A.).**
3. **Adjust R8044 on the DVD Main C.B.A. so that the level A becomes 1.0 V[P-P]±0.05 V[P-P].**

Fig. E3



7.2.5. EVR (Electronic Variable Register) ADJUSTMENT WITH THE REMOTE CONTROL

This unit has electronic technology using I2C Bus concept.
The following control functions are adjusted by using "On Screen Displays" and the remote control instead of adjusting mechanical controls (VR).

Control functions	※1 Address	Range	Default
SUB COLOR	00	C0 - FF, 00 - 3F	00
SUB TINT	01	E0 - FF, 00 - 1F	00
SUB BRIGHT	02	C0 - FF, 00 - 3F	F0
CONTRAST	03	C1 - FF, 00	00
SUB SHARPNESS	04	E0 - FF, 00 - 1F	F0
R CUT -OFF	05	00 - 7F	1E
G CUT -OFF	06	00 - FD	3C
B CUT -OFF	07	00 - FD	3C
G DRIVE	08	00 - 7F	40
B DRIVE	09	00 - 7F	40
SUB CONTRAST	0A	00 - 0F	06
H-CENTER	0B	00 - 0F	08
V SIZE	0D	00 - 7F	40
V POSITION	0E	00 - 7F	02

Bold-faced letters → Control functions which need to be adjusted.

Note:

※1 Address is not displayed on the TV screen.
Other Addresses except above are not used.

7.2.6. EVR ADJUSTMENT ITEM

The following Items need to be adjusted for EVR adjustment.

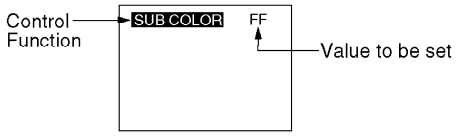
- SUB CONTRAST ADJUSTMENT

- FOCUS, SCREEN, CUT OFF, DRIVE ADJUSTMENT
- SUB COLOR/SUB TINT ADJUSTMENT
- DEFLECTION DISTORTION CORRECTION ADJUSTMENT
- WHITE BALANCE ADJUSTMENT
- SUB BRIGHTNESS ADJUSTMENT

7.2.7. HOW TO ENTER EVR ADJUSTMENT MODE

Press and hold STOP, SKIP + and VOL - buttons of operation panel on the unit together over 5 seconds with no cassette inserted.
The adjustment overlay will appear to Enter EVR adjustment mode.

Fig. E4-1

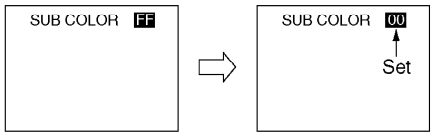


7.2.7.1. How to adjust:

1. **Press UP/DOWN ▲ ▼ key on the remote control to select control function to be adjusted.**
   Important Note:
   Make a note of the original value of the controls before modifying in case the wrong control is adjusted.

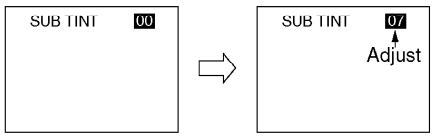
2. **Press RIGHT/LEFT ◀ ▶ key on the remote control so that the shaded area moves to the value.**

Fig. E4-2



3. **Press UP/DOWN ▲ ▼ key on the remote control to adjust the value of the selected control.**

Fig. E4-3

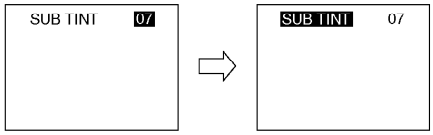


Note:
You can select a desired channel by using the numbered keys on the remote control in EVR adjustment mode.

4. **Press RIGHT/LEFT ◀ ▶ key on the remote control so that the**

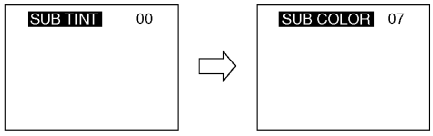
shaded area moves to the control function.

Fig. E4-4



5. Press UP/DOWN ▲ ▼ key on the remote control to select a control function for the next adjustment if necessary.

Fig. E4-5



7.2.7.2. How to release from EVR Adjustment Mode:

Press and hold STOP, SKIP + and VOL - buttons of operation panel on the unit together over 5 seconds again or press the POWER button OFF to release EVR adjustment mode. The adjusted value will be written to Memory IC (IC6004).

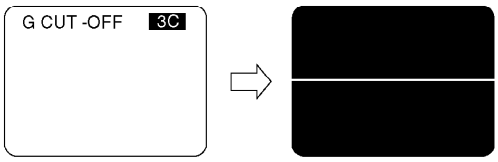
7.2.7.3. HOW TO ENTER SERVICE MODE

1. Set the unit to TV Mode.
2. Enter EVR adjustment mode.
3. Press DISPLAY key on the remote control for collapse scan.

Note:

Before pressing DISPLAY key on the remote control for collapse scan, select the desired control function and move the shaded area to the value for adjustments you will proceed.

Fig. E5



7.2.7.4. How to release from Service Mode:

Press DISPLAY key again on the remote control.

7.2.8. SUB CONTRAST ADJUSTMENT

Purpose:

To set the optimum sub contrast level.

Symptom of Misadjustment:

The picture is too dark or too light.

Test Point :

TP49 (CRT C.B.A.)

Adjustment :

SUB CONTRAST (EVR),

Specification :

Refer to descriptions below.

Input :

Video Input Jack,
Crosshatch Pattern Signal 1 V[p-p] (75 Ω terminated)

Mode :

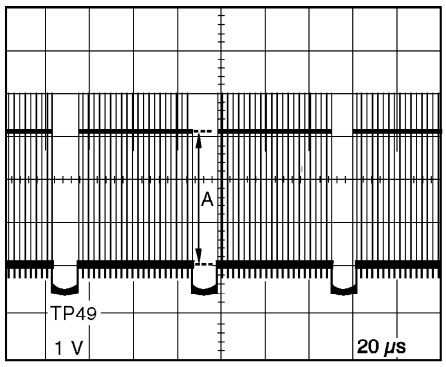
STOP

Equipment :

Oscilloscope,
NTSC Video Pattern Generator

1. **Supply a Crosshatch Pattern Signal to the Video Input Jack.**
2. **Connect the Oscilloscope to TP49 on the CRT C.B.A. (Use TP47 for GND.)**
3. **Select SUB BRIGHT in EVR adjustment mode. Then, after making a note of the original value, adjust to the (C0).**
4. **Select SUB CONTRAST in EVR adjustment mode and adjust so that the level A is (3.0 V[p-p]±0.1 V[p-p]: For model with 20 inch CRT), or (3.15 V[p-p]±0.1 V[p-p]: For model with 27 inch CRT).**
5. **Select SUB BRIGHT in EVR adjustment mode and reset to the original value.**

Fig. E6



7.2.9. FOCUS, SCREEN, CUT OFF, DRIVE ADJUSTMENT

Purpose:

To set the optimum Screen.

Symptom of Misadjustment:

The picture is will be an improper screen color mix.

Test Point :

TP50 (CRT C.B.A.)

Adjustment :

FOCUS CONTROL
(Flyback Transformer),
SCREEN CONTROL (Flyback Transformer),
SUB BRIGHT (EVR),
G DRIVE (EVR),
B DRIVE (EVR),
R CUT-OFF (EVR),
G CUT-OFF (EVR),
B CUT-OFF (EVR)

Specification :

Refer to descriptions below.

Input :

Video Input Jack,
Monoscope Pattern Signal

Mode :

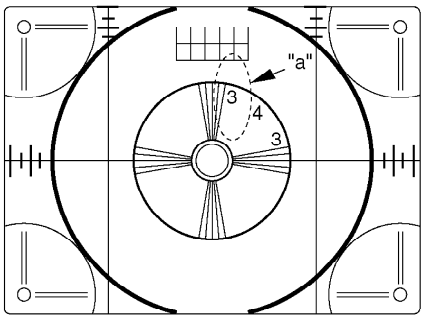
STOP

Equipment :

Oscilloscope,
NTSC Video Pattern Generator

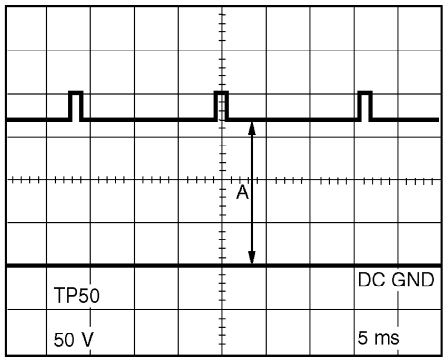
1. **Supply a Monoscope Pattern Signal to the Video Input Jack.**
2. **Connect the Oscilloscope to TP50 on the CRT C.B.A.**
   (Use TP47 for GND.)
3. **Select SUB BRIGHT and move the shaded area to the value in EVR adjustment mode.**
4. **Adjust the FOCUS CONTROL on the Flyback Transformer so that the "a" is the sharpest.**

Fig. E7-1



5. Turn the SCREEN CONTROL on the Flyback Transformer fully counterclockwise.
6. Press DISPLAY key on the remote control for collapse scan. (Refer to "HOW TO ENTER SERVICE MODE.")
7. Adjust SUB BRIGHT in EVR adjustment mode so that the level A is (170 VDC±5 VDC: For model with 20 inch CRT), or (185 VDC±5 VDC: For model with 27 inch CRT).

Fig. E7-2



8. Turn the SCREEN CONTROL on the Flyback Transformer clockwise carefully and stop at the point where any color is first observed.
9. In EVR adjustment mode, select the two colors not observed in step 8 from the following control functions (R CUT-OFF, G CUT-OFF, B CUT-OFF) and adjust so that the horizontal line becomes white.
   For example, if the horizontal line appeared red in step 8, select and adjust the B CUT-OFF and G CUT-OFF. (See NOTE)
10. Press DISPLAY key on the remote control again to return for full frame scan.
11. Select SUB BRIGHT in EVR adjustment mode and adjust so that

the picture has adequate brightness.

12. Select G DRIVE and B DRIVE in EVR adjustment mode and adjust so that the entire screen is white.

Note:

Before pressing DISPLAY key on the remote control for collapse scan, select the desired control function and move the shaded area to the value.

7.2.10. SUB COLOR/SUB TINT ADJUSTMENT

Purpose :

To set the standard color phase.

Symptom of Misadjustment :

Color phase will be shifted.

Test Point :

TP49 (CRT C.B.A.)

Adjustment :

SUB COLOR (EVR),
SUB TINT (EVR),

Specification :

Refer to descriptions below.

Input :

Video Input Jack,
Rainbow Color Bar

Mode :

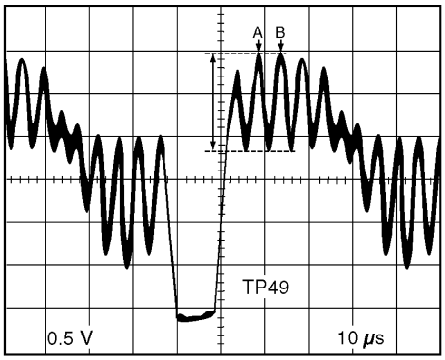
STOP

Equipment :

Oscilloscope,
NTSC Video Pattern Generator

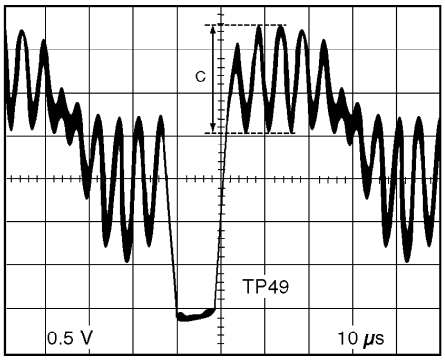
1. Supply the Rainbow Color Bar signal to Video Input Jack.
2. Connect the Oscilloscope to TP49 on the CRT C.B.A.
3. Select SUB BRIGHT in EVR adjustment mode. Then, after making a note of original value, adjust to the (C0).
4. Select SUB TINT in EVR adjustment mode and adjust so that level A and B should be equal in amplitude.

Fig. E8-1



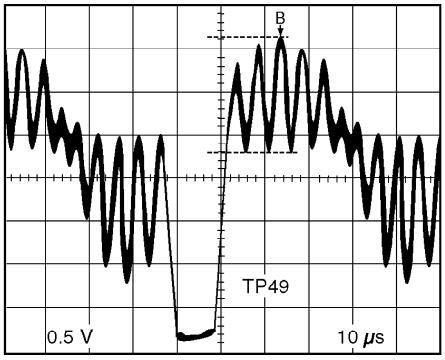
5. Select SUB COLOR in EVR adjustment mode and adjust which higher level that level C is 1.50 V[p-p]±0.15 V[p-p].

Fig. E8-2



6. Select SUB TINT in EVR adjustment mode and increase level B 1 clicks above the same level.

Fig. E8-3



7. Select SUB BRIGHT in EVR adjustment mode and reset to the original value.

7.2.11. DEFLECTION DISTORTION CORRECTION ADJUSTMENT

Purpose :

To set the optimum picture.

Symptom of Misadjustment :

The picture is distortion.

Test Point :

Adjustment :

V POSITION (EVR),
V SIZE (EVR),
H-CENTER (EVR),

Specification :

Refer to descriptions below.

Input :

Video Input Jack,
Crosshatch Pattern Signal,
Monoscope Pattern Signal

Mode :

STOP

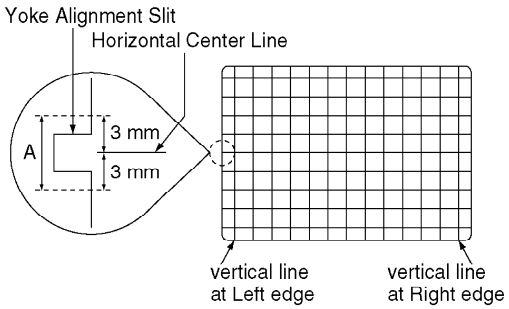
Equipment :

NTSC Video Pattern Generator

1. Supply a Crosshatch Pattern Signal to the Video Input Jack.

2. Confirm that the Horizontal Center Line is within the limits of A.

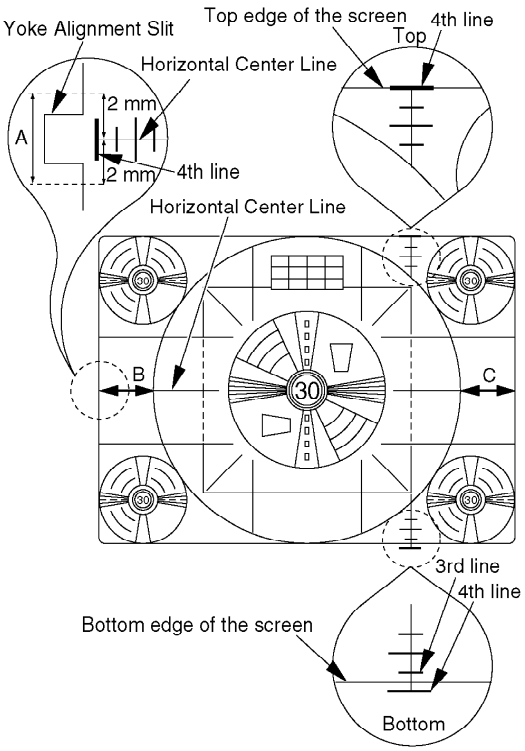
Fig. E9-1



3. Supply a Monoscope Pattern Signal to the Video Input Jack.

4. Select V POSITION in EVR adjustment mode and adjust Horizontal Center Line is within the limits of A.

Fig. E9-2



5. **Select V SIZE in EVR adjustment mode and adjust so that the top 4th line is just in view.**
6. **Select H-CENTER in EVR adjustment menu and adjust so that B is approximately equal to width C.**
7. **Supply a Crosshatch Pattern Signal to the Video Input Jack. Then, confirm that the picture is no distortion.**

7.2.12. WHITE BALANCE ADJUSTMENT

Purpose:

To set the standard white level for each color temperature.

Symptom of Misadjustment :

White becomes bluish or reddish.

Test Point :

TP50 (CRT C.B.A)

Adjustment :

FOCUS CONTROL
(Flyback Transformer),
SCREEN CONTROL (Flyback Transformer),
SUB BRIGHT (EVR),

G DRIVE (EVR),
B DRIVE (EVR),
R CUT-OFF (EVR),
G CUT-OFF (EVR),
B CUT-OFF (EVR)

Specification :

Refer to descriptions below.

Input :

Video Input Jack,
Monoscope Pattern Signal,
White Pattern Signal

Mode :

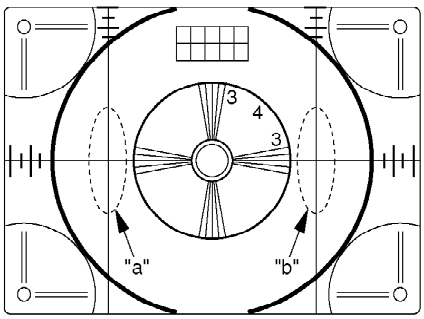
STOP

Equipment :

NTSC Video Pattern Generator,
White Pattern Generator,
Oscilloscope

1. **Supply a Monoscope Pattern Signal to the Video Input Jack.**
2. **Connect the Oscilloscope to TP50 on the CRT C.B.A. (Use TP47 for GND.)**
3. **Select SUB BRIGHT and move the shaded area to the value in EVR adjustment mode.**
4. **Adjust the FOCUS CONTROL on the Flyback Transformer so that the "a" and "b" are the sharpest.**

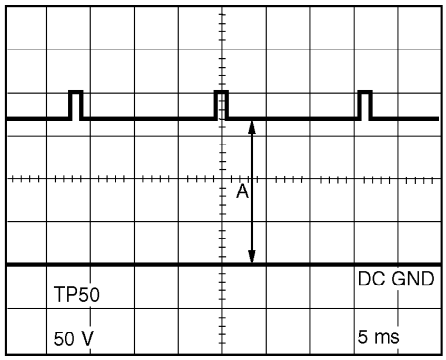
Fig. E10-1



5. **Turn the SCREEN CONTROL on Flyback Transformer fully counterclockwise.**

6. Press DISPLAY key on the remote control for collapse scan. (Refer to "HOW TO ENTER SERVICE MODE.")
7. Adjust SUB BRIGHT in EVR adjustment mode so that the level A is 175 VDC±5 VDC.

Fig. E10-2



8. Turn the SCREEN CONTROL on the Flyback Transformer clockwise carefully and stop at the point where red or blue is first observed.
9. In EVR adjustment mode, select the two colors not observed in step 8 from the following control functions (R CUT-OFF, G CUT-OFF, B CUT-OFF) and adjust so that the horizontal line becomes white.
   For example, if the horizontal line appeared red in step 8, select and adjust the B CUT-OFF and G CUT-OFF. (See NOTE)
10. Supply a White Pattern Signal to the Video Input Jack.
11. Press DISPLAY key on the remote control again to return for full frame scan.
12. Select G DRIVE and B DRIVE in EVR adjustment mode and adjust so that the entire screen is white.
13. Confirm that the screen is tracking the White Pattern properly. If NG, repeat the above steps 8, 9 and 12 until the screen is properly tracking the White Pattern.
14. Select SUB BRIGHT in EVR adjustment mode and adjust correctly.

Note:

Before pressing DISPLAY key on the remote control for collapse

scan, select the desired control function and move the shaded area to the value.

7.2.13. SUB BRIGHTNESS ADJUSTMENT

Note:

Perform this adjustment in a darkened room.

Purpose :

To set the optimum brightness level.

Symptom of Misadjustment :

The picture is too white or too black.

Test Point :

Adjustment :

SUB BRIGHT (EVR),

Specification :

Refer to descriptions below.

Input :

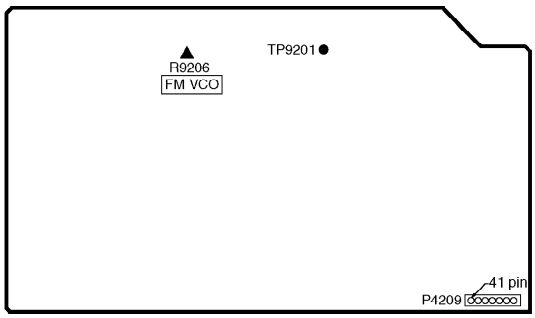
Mode :

STOP

1. **Do not input any signal to the unit.**
2. **Set INPUT SELECT item to LINE in SET UP TV menu to display black screen.**
3. **Select SUB BRIGHT in EVR adjustment mode, and adjust so that the black screen starts to turn gray (lighting only).**

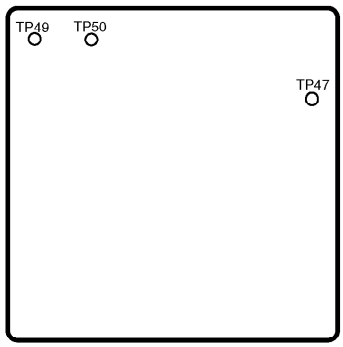
7.3. TEST POINTS AND CONTROL LOCATION

Audio C.B.A.



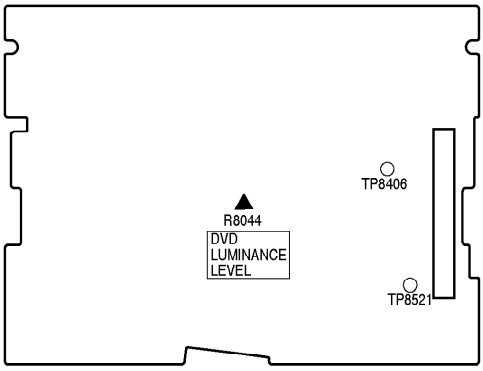
(Foil Side)

CRT C.B.A.



(Foil Side)

DVD Main C.B.A.



(Component Side)

Test Point Information

● Test Point with a Test Pin.

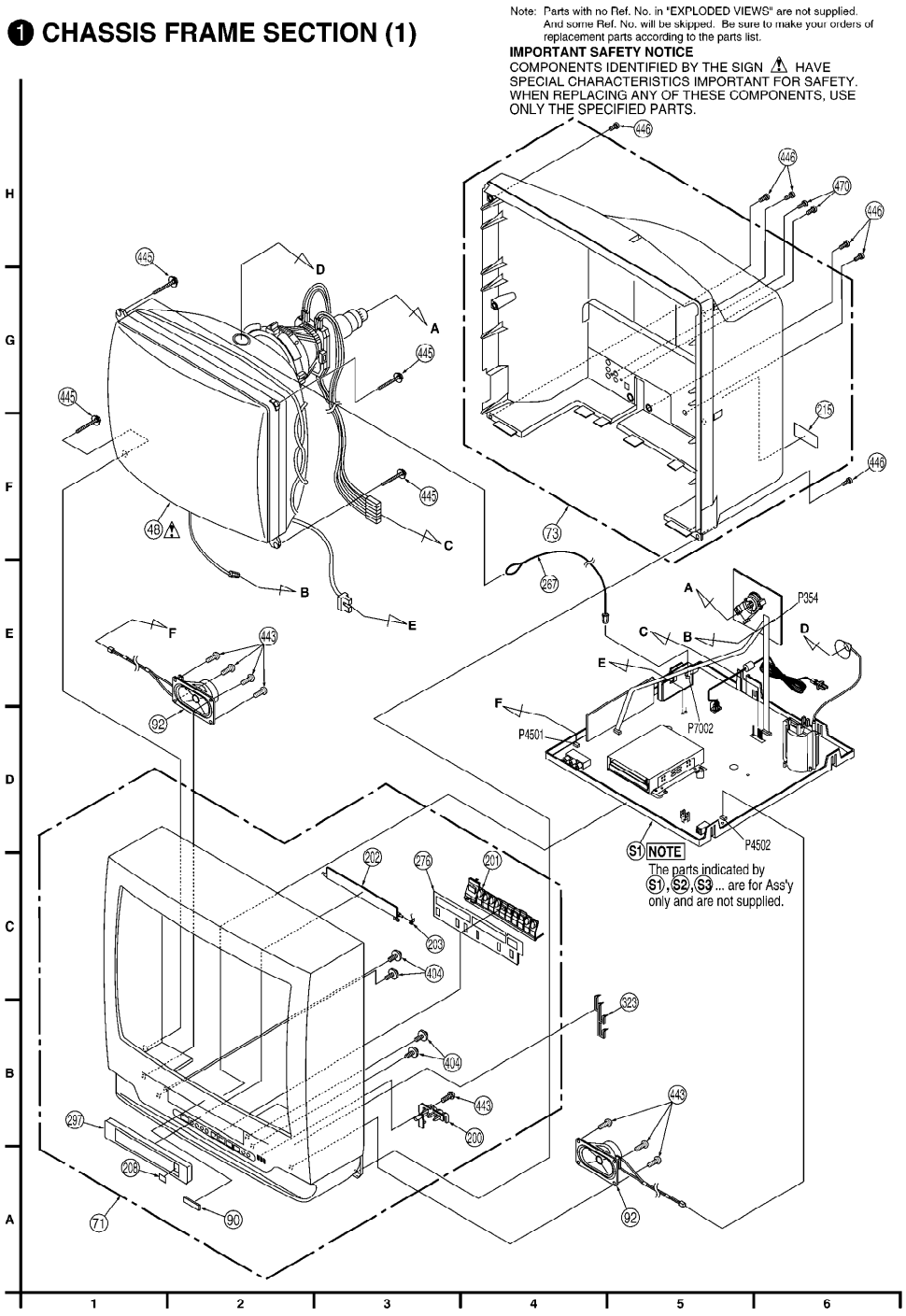
Ⓘ Test Point with a jumper wire across a hole in the P.C.B.

○ Test Point with no Test Pin.

8. SCHEMATIC DIAGRAMS

8.1. SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES

8.2. MAIN/ OPTICAL AUDIO JACK SCHEMATIC DIAGRAMS


❶ CHASSIS FRAME SECTION (1)
Note: Parts with no Ref. No. in "EXPLODED VIEWS" are not supplied. And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.
IMPORTANT SAFETY NOTICE
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.
NOTE
The parts indicated by (S1),(S2),(S3)... are for Ass'y only and are not supplied.
P354
P4501
P7002
P4502

8.3. AUDIO SCHEMATIC DIAGRAM

8.4. Y/C SEPARATION SCHEMATIC DIAGRAM

8.5. CRT SCHEMATIC DIAGRAM

8.6. DVD MAIN SCHEMATIC DIAGRAMS

8.7. DVD SUB SCHEMATIC DIAGRAM

8.8. INTERCONNECTION SCHEMATIC DIAGRAM

8.9. VOLTAGE CHART

9. CIRCUIT BOARD LAYOUT

9.1. MAIN C.B.A.

9.2. AUDIO/ Y/C SEPARATION C.B.A.

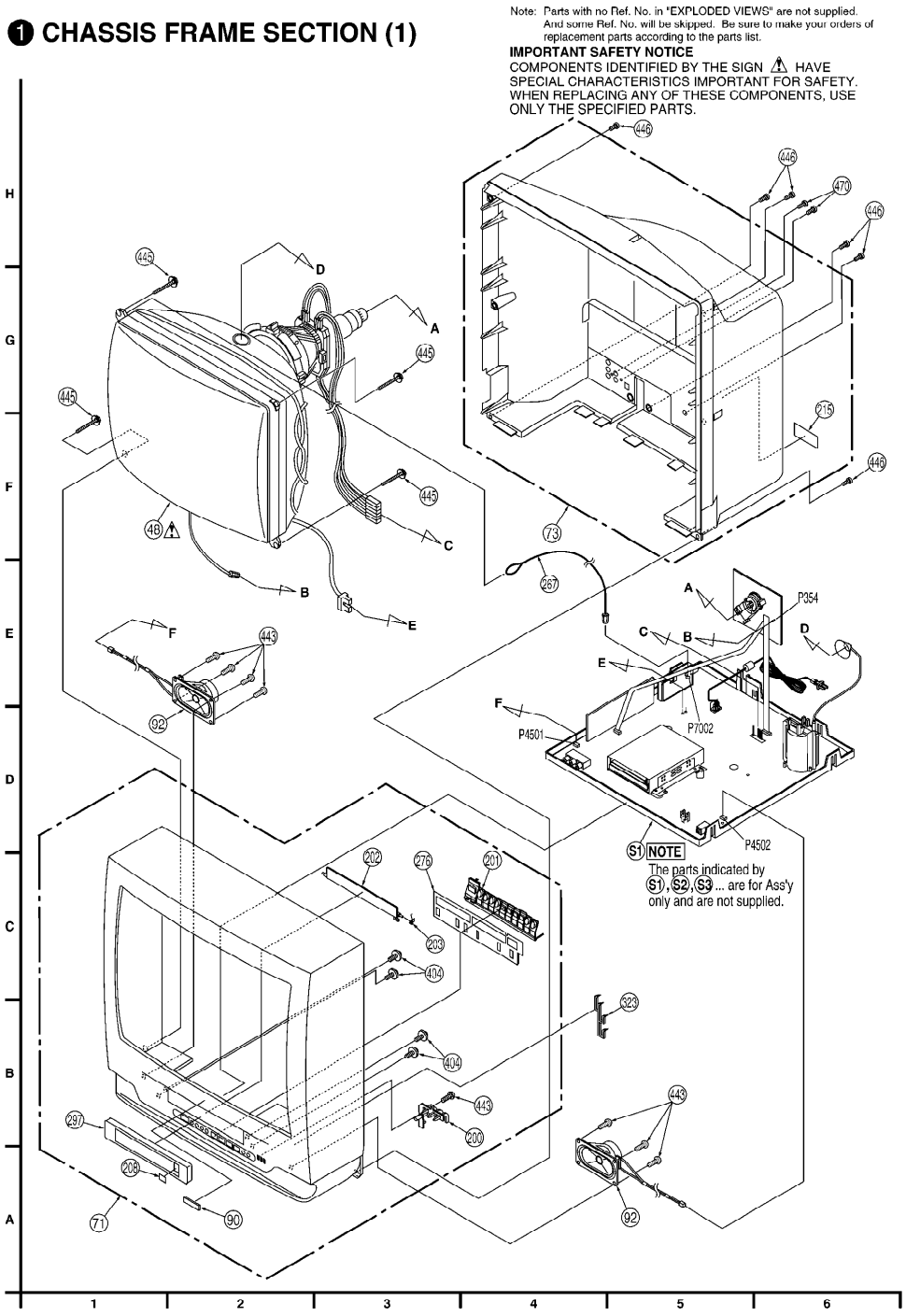
9.3. CRT/ OPTICAL AUDIO JACK C.B.A.

9.4. DVD MAIN/ DVD SUB C.B.A.

10. BLOCK DIAGRAMS

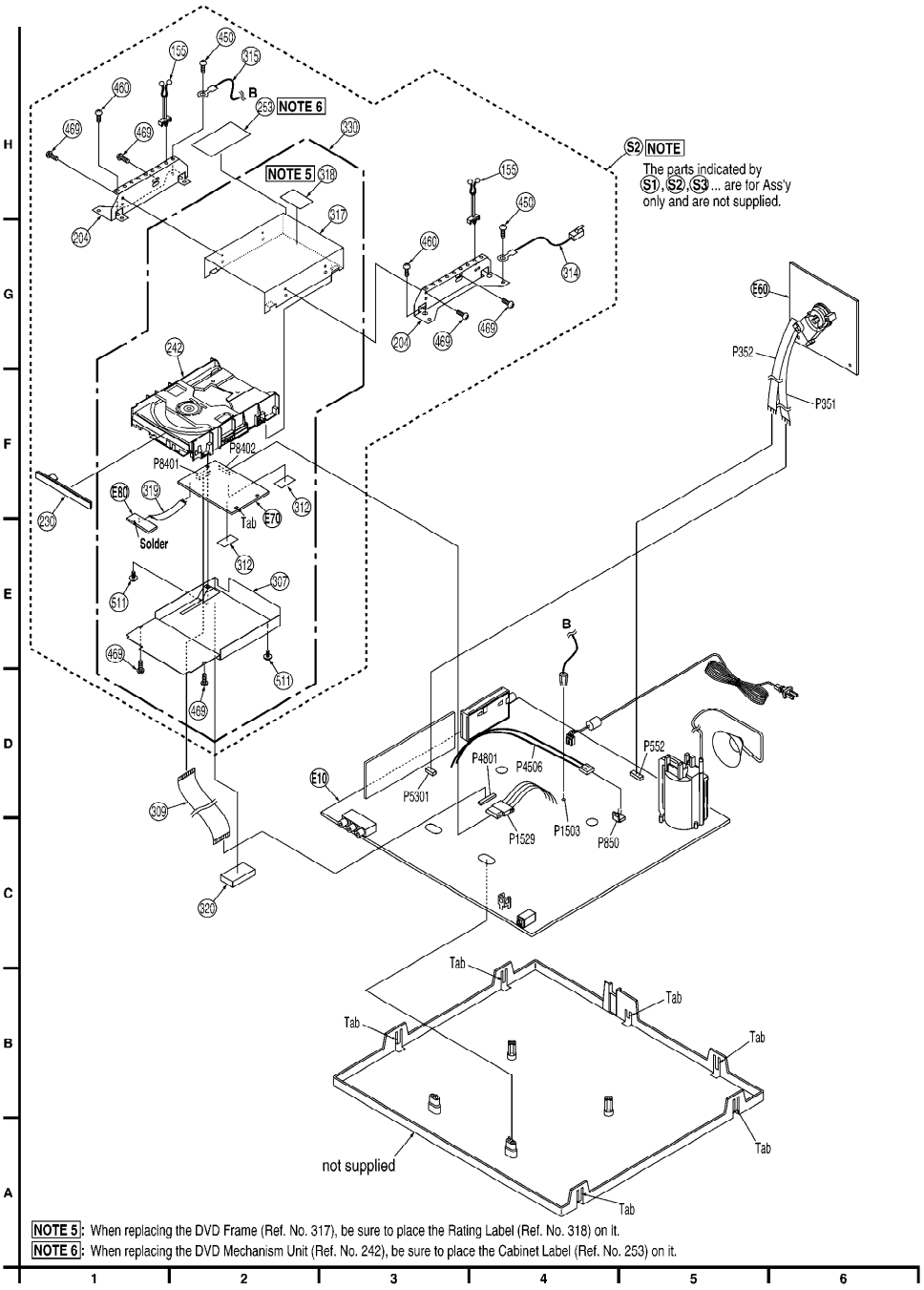
11. EXPLODED VIEWS (Model: PV-20D53)

11.1. CHASSIS FRAME SECTION (1)


❶ CHASSIS FRAME SECTION (1)
Note: Parts with no Ref. No. in "EXPLODED VIEWS" are not supplied. And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.
IMPORTANT SAFETY NOTICE
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.
NOTE
The parts indicated by (S1),(S2),(S3)... are for Ass'y only and are not supplied.
P354
P4501
P7002
P4502

11.2. CHASSIS FRAME SECTION (2)

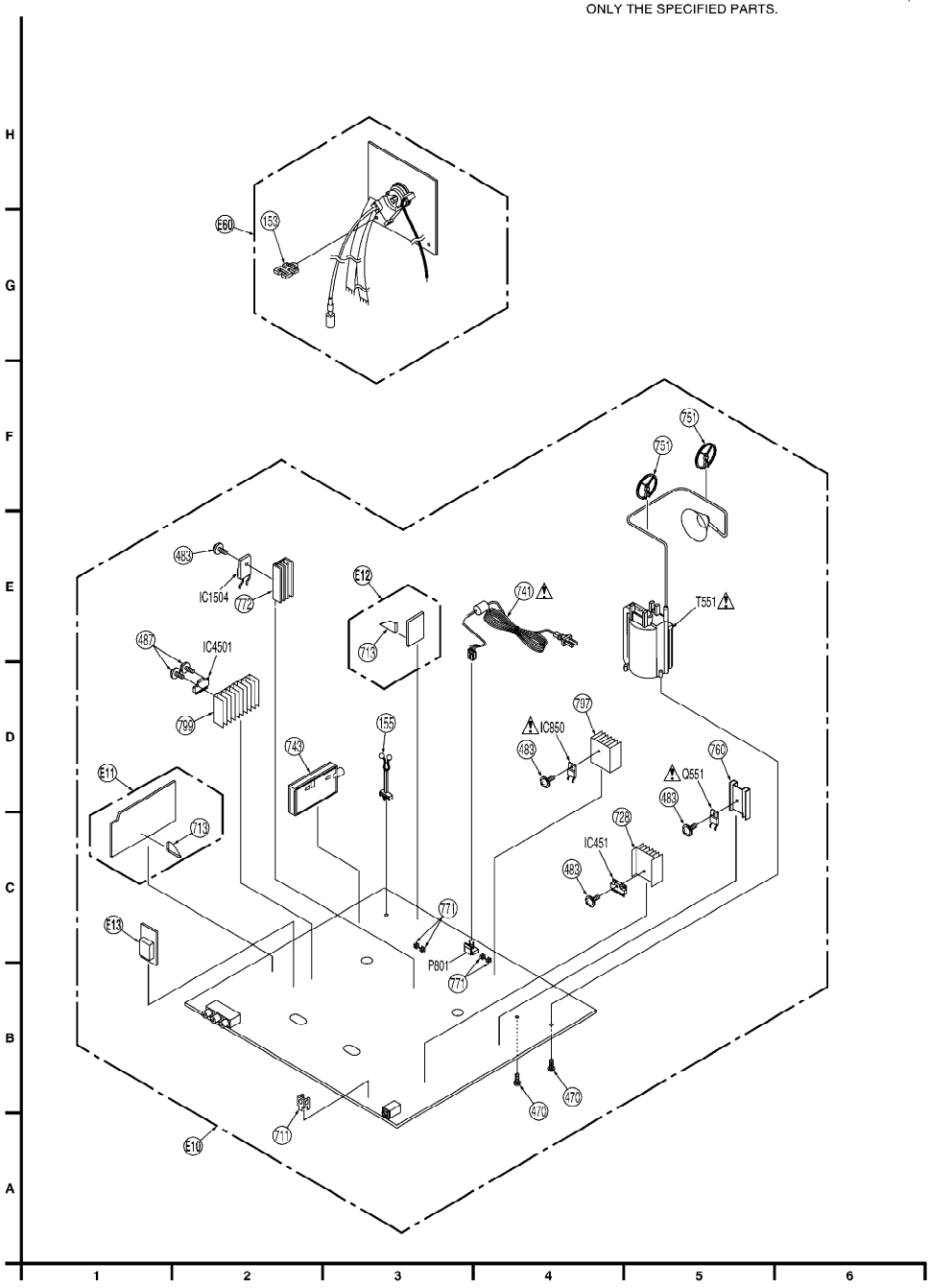
❷ CHASSIS FRAME SECTION (2)


NOTE 6
NOTE 5
S2 NOTE
The parts indicated by S1, S2, S3 ... are for Ass'y only and are not supplied.
Solder
Tab
P8401
P8402
P4801
P4506
P5301
P1529
P1503
P850
P552
P352
P351
not supplied
NOTE 5: When replacing the DVD Frame (Ref. No. 317), be sure to place the Rating Label (Ref. No. 318) on it.
NOTE 6: When replacing the DVD Mechanism Unit (Ref. No. 242), be sure to place the Cabinet Label (Ref. No. 253) on it.

11.3. CHASSIS FRAME SECTION (3)

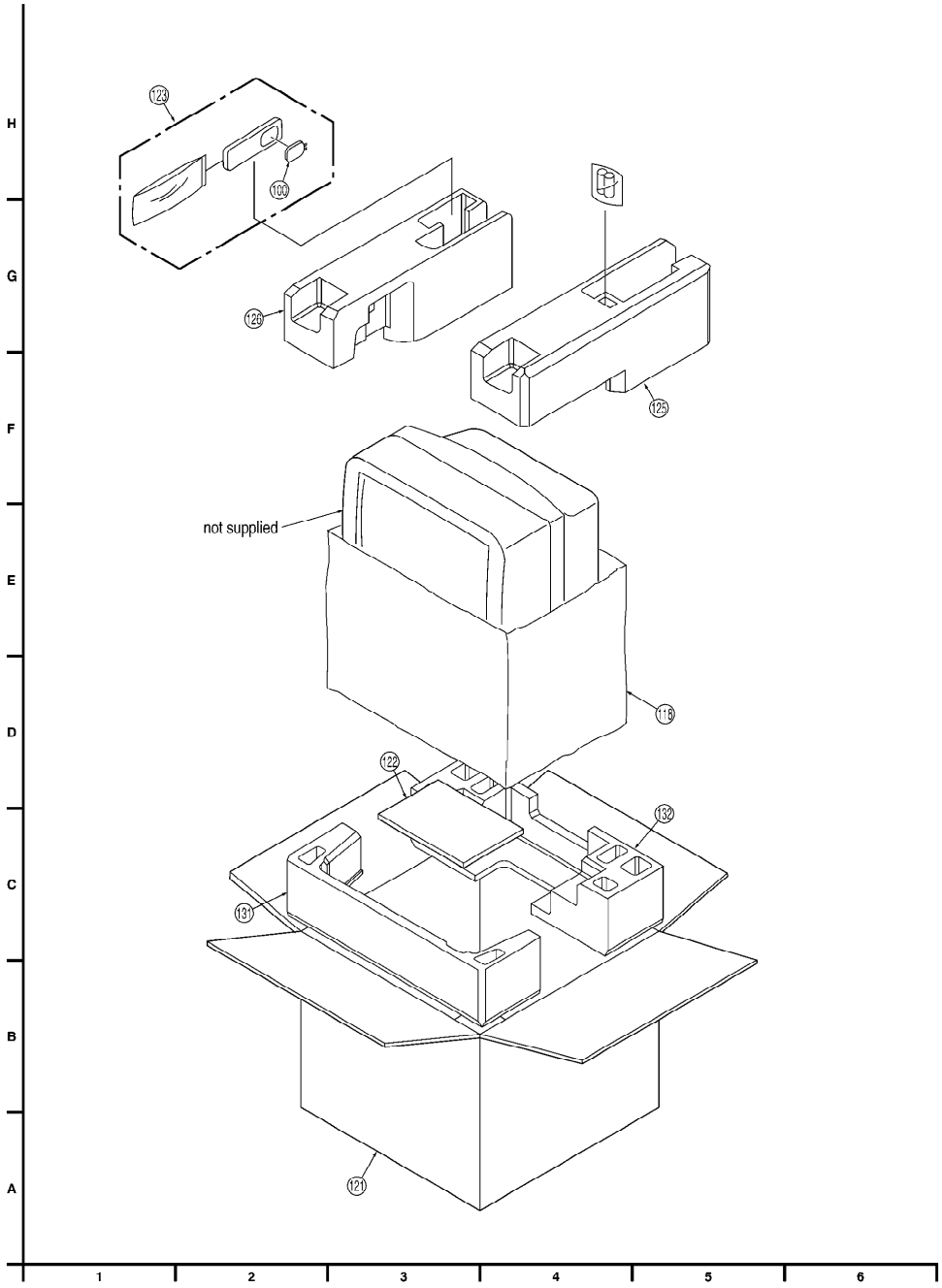
❸ CHASSIS FRAME SECTION (3)

IMPORTANT SAFETY NOTICE
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.



11.4. PACKING PARTS AND ACCESSORIES SECTION

❹ PACKING PARTS AND ACCESSORIES SECTION



12. REPLACEMENT PARTS LISTS (Model: PV-20D53)

BEFORE REPLACING PARTS, READ THE FOLLOWING:

12.1. REPLACEMENT NOTES

12.1.1. General Notes

1. Use only original replacement parts:

To maintain original function and reliability of repaired units, use

only original replacement parts which are listed with their part numbers in the parts list.

2. IMPORTANT SAFETY NOTICE
   Components identified by the sign ⚠ have special characteristics important for safety. When replacing any of these components, use only the specified parts.
3. SPECIAL NOTE
   All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "ELECTROSTATICALLY SENSITIVE (ES) DEVICES" section of this service manual.
4. Parts with no Ref. No. in "EXPLODED VIEWS" are not supplied. And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.
5. Parts different in shape or size may be used. However, only interchangeable parts will be supplied as service replacement parts.
6. Definition of Parts supplier:
   A. Parts with mark "SPC" in the Remarks column are supplied from Spare Parts Center of Panasonic AVC Company.
   B. Parts without mark in the Remarks column are supplied from MKI.
7. Item numbers with capital letter E (Example: E10, E20, ...) in the Ref. No. column are shown in the exploded views.
8. Parts whose Ref. Nos. are the same are interchangeable as replacement parts. Any of these parts may be ordered and used as a replacement part.

12.1.2. Mechanical Replacement Notes

1. Section No. of parts shown in Exploded Views are indicated in the Remarks column.
2. The Infrared Remote Control Unit (Ref. No. 123) replacement part is available as a complete assembly unit only. Do not try to disassemble the Infrared Remote Control Unit. However, the battery cover is available separately as a replacement part.

3. When replacing the DVD Frame (Ref. No. 317), be sure to place the Rating Label (Ref. No. 318) on it.

4. When replacing the DVD Mechanism Unit (Ref. No. 242), be sure to place the Cabinet Label (Ref. No. 253) on it.

12.1.3. Electrical Replacement Notes

1. Unless otherwise specified;
All resistors are in Ω, K = 1,000 Ω, M = 1,000 kΩ.

2. Abbreviation

RTL:
Retention Time Limited
This indicates that the retention time is limited for this item. After the discontinuation of this item in production, it will no longer be available.

NR:
Non Repairable Board Ass'y

MGF CHIP:
Metal Glaze Film Chip

C CHIP:
Ceramic Chip

COMPLX CMP:
Complex Component

W FLMPRF:
Wirewound Flameproof

C.B.A.:
Circuit Board Assembly

P.C.B.:
Printed Circuit Board

E.S.D.:
Electrostatically Sensitive Devices

3. SERVICE OF CHIP PARTS
When servicing chip parts, please use a soldering iron of less than 30 W.

4. **When replacing 0 Ω resistor, a wire can be substituted for it.**
5. **Since the UHF/VHF TUNER/TV DEMODULATOR UNIT (Ref. No. 743) has already been pre-adjusted at the factory, do not try to adjust the UHF/VHF TUNER/TV DEMODULATOR UNIT. The UHF/ VHF TUNER/TV DEMODULATORUNIT replacement part is available as a complete assembly unit only.**
6. **EEP ROM IC (IC6004) replacement note:**
   There are 2 types of EEPROM IC (IC6004) used on the Main C.B.A. (DIP TYPE and SOP TYPE). However, these are same reliability, please refer to "MAIN C.B.A." in CIRCUIT BOARD LAYOUT.
7. **MAIN C.B.A. replacement note:**
   When the MAIN C.B.A. is replaced, the Jumper wire(J801 or J810) of the new MAIN C.B.A. must be cut before use. If the Jumper wire isn't cut, the power does not turned on to the TV circuit. / As for the location of the Jumper wire, pleaserefer to "MAIN C.B.A." in CIRCUIT BOARD LAYOUT.

12.2. MECHANICAL REPLACEMENT PARTS LIST

Definition of Parts supplier:

1. **Parts with mark "SPC" in the Remarks column are supplied from Spare Parts Center of Panasonic AVC Company.**
2. **Parts without mark in the Remarks column are supplied from MKI.**

MECHANICAL REPLACEMENT PARTS

Ref. No.	Part No.	Part Name & Description	Remarks
48	LXQVB1202R2	COLOR PICTURE TUBE UNIT	1 ⚠
71	LXQKY1203R2	FRONT CABINET ASS'Y	1
73	LXQKV1203R2	REAR COVER UNIT	1
90	TBMA003	BADGE,ABS RESIN	1
92	LXQAS9270F	SPEAKER UNIT	1
100	LSKF0518	BATTERY COVER	4
118	LPE64004A	BAG,POLYETHYLENE	4
121	LSPG1454	PACKING CASE,PAPER	4
122	LSQT0669B	INSTRUCTION BOOK	4
123	LSSQ0373	INFRARED REMOTE CONTROL UNIT	4
125	LPJ61028A	TOP CUSHION RIGHT,STYROFOAM	4
126	LPJ61027A	TOP CUSHION LEFT,STYROFORM	4
131	LPJ62027A	BOTTOM CUSHION FRONT,STYROFOAM	4
132	LPJ62028A	BOTTOM CUSHION REAR,STYROFOAM	4
153	TMM7443-1	CLAMPER	3
155	TMM76403-1	CLAMPER	2,3
200	LKK683009A	PANEL LIGHT	1
201	LSGU0567	OPERATION BUTTON	1
202	LXQKF1273R2	DVD DISK DOOR-LID UNIT	1
203	LSMB0170	DVD CASSETTE DOOR SPRING	1
204	LSMA0612	DVD MOUNT PLATE,STEEL	2
208	TMK77708	CUSHION,RUBBER	1
215	LSQL1421	DOLBY & DTS CAUTION LABEL	1
230	LSKF0526	TRAY COVER	2
242	LSXK0118	DVD MECHANISM UNIT	2
253	LQF62003A	CABINET LABEL	2
267	VEKS5874	FM RADIO ANTENNA CORD,0V	1
276	LSMF0046	SHEET,NYLON+RAYON	1
297	LSKW0138	DVD DISK DOOR UNIT	1
307	LSMA0648	SHIELD CASE	2
309	LSJW0044	FLAT FLEXIBLE CABLE W/OUT PLUG,12V DC	2
312	LMMY0030	HEAT SHEET,SI	2
314	VEKS5872	GROUNDING CABLE W/PLUG,0V	2
315	VEKS9428	GROUNDING CABLE W/PLUG,0V	2
317	LMMK0201	DVD FRAME	2
318	LSQL1414	RATING LABEL	2
319	LSJW0029	FLAT FLEXIBLE CABLE W/OUT PLUG,6V DC	2
320	J0KD00000022	FERRITE CORE	2
323	LKK283004A	CLAMPER	1
330	LSXK0105	DVD BLOCK	2
404	VHDS0472	SCREW,STEEL	1
443	XTV4+12A	TAPPING SCREW,STEEL	1
445	LHT60002Y	SCREW,STEEL	1
446	XTV4+16A	TAPPING SCREW,STEEL	1
450	VHDS0309	SCREW,STEEL	2
460	XTN4+12A	TAPPING SCREW,STEEL	2
469	XSN3+6	SCREW,STEEL	2
470	XTV3+10G	TAPPING SCREW,STEEL	1,3
483	XYN3+F10S	SCREW W/WASHER,STEEL	3
487	XYN3+J8	SCREW W/WASHER,STEEL	3
511	XYC26+CF8	SCREW W/WASHER,STEEL	2
711	PNA4611M00HC	INFRARED RECEIVER UNIT	3
713	VMAS1912	P.C.B. SUPPORT ANGLE	3
728	LUS63008A	HEAT SINK	3

Ref. No.	Part No.	Part Name & Description	Remarks
741	LSJA03492017	AC CORD W/PLUG,120V	3 ⚠
743	ENG36715G	TUNER,UHF/VHF NR	3
751	LML69001A	ANODE LEAD CLAMPER	3
760	TUC77628	HEAT SINK	3
771	EYF52BC	FUSE HOLDER	3
772	LSSC0408	HEAT SINK	3
797	LSSC0529	HEAT SINK	3
799	LSSC0584	AMP HEAT SINK	3
E10	LSEP2084C	MAIN C.B.A.	2,3 RTL
E11	LSEP2120A	AUDIO C.B.A.	3 RTL
E12	LSEP2086A	OPTICAL AUDIO JACK C.B.A.	3 RTL
E13	LSEP2119A	Y/C SEPARATION C.B.A.	3 RTL
E60	LRP63022X	CRT C.B.A.	2,3 RTL
E70	LSEP2091A1	DVD MAIN C.B.A.	2 RTL
E80	LSEP2014A	DVD SUB C.B.A.	2 RTL

SERVICE FIXTURES AND TOOLS

Ref. No.	Part No.	Part Name & Description	Remarks
	DVDT-S01	DVD TEST DISC	SPC

12.3. ELECTRICAL REPLACEMENT PARTS LIST

Definition of Parts supplier:

1. All parts are supplied from MKI.

PRINTED CIRCUIT BOARD ASSEMBLY

Ref. No.	Part No.	Part Name & Description	Remarks
E10	LSEP2084C	MAIN C.B.A.	E.S.D. RTL
E11	LSEP2120A	AUDIO C.B.A.	E.S.D. RTL
E12	LSEP2086A	OPTICAL AUDIO JACK C.B.A.	RTL
E13	LSEP2119A	Y/C SEPARATION C.B.A.	RTL
E60	LRP63022X	CRT C.B.A.	RTL
E70	LSEP2091A1	DVD MAIN C.B.A.	E.S.D. RTL
E80	LSEP2014A	DVD SUB C.B.A.	RTL

12.3.1. MAIN C.B.A.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC451	C1AA00000024	IC, LINEAR	
IC850	C5HABZZ00109	IC, LINEAR	⚠
IC1501	C5HABZZ00101	IC, LINEAR	⚠
IC1502	CNC1S101R1KT	IC, LINEAR	⚠
IC1502	CNC1S101S1KT	IC, LINEAR	⚠
IC1503	C0DAEMZ00005	IC, LINEAR	
IC1503	B1AZKD000001	IC, LINEAR	
IC1503	C0DAEMZ00001	IC, LINEAR	
IC1504	C0DAEGG00008	IC, LINEAR	
IC4501	AN7522N	IC, LINEAR	
IC4701	C0ABBB000017	IC, LINEAR	
IC4701	C1BB00000177	IC, LINEAR	
IC5301	AN15167A-VT	IC, LINEAR	
IC5361	C1AB00001682	IC, LINEAR	
IC5361	C1AB00001519	IC, LINEAR	
IC5601	C1AB00001340	IC, LINEAR	
IC6001	MN101D06FCK	IC, 8BIT MICROCONTROLLER	E.S.D.
IC6004	LSSK0027	IC, 1K EEP ROM	E.S.D.
IC6005	C0EBJ0000080	IC, CMOS STANDARD LOGIC	E.S.D.
IC6005	C0EBJ0000099	IC, CMOS STADNARD LOGIC	E.S.D.
IC6005	RN5VS47CA-TR	IC, CMOS STANDARD LOGIC	E.S.D.

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q431	2SB0709A0L	TRANSISTOR SI PNP CHIP	
Q431	B1ADCF000001	TRANSISTOR SI PNP CHIP	
Q501	B1AACN000013	TRANSISTOR SI NPN	
Q523	B1ACBM000001	TRANSISTOR SI PNP	
Q523	2SA17670QA	TRANSISTOR SI PNP	
Q523	2SB12210QA	TRANSISTOR SI PNP	
Q551	B1BAET000006	TRANSISTOR SI NPN	⚠
Q571	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q571	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q591	2SC3311AHA	TRANSISTOR SI NPN	
Q801	2SC3311ARA	TRANSISTOR SI NPN	
Q801	2SC3311ASA	TRANSISTOR SI NPN	
Q1501	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q1501	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q1502	2SB0709A0L	TRANSISTOR SI PNP CHIP	
Q1502	B1ADCF000001	TRANSISTOR SI PNP CHIP	
Q1503	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q1503	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q1504	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q1504	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q1505	B1BACC000010	TRANSISTOR SI NPN	
Q1505	2SD1581-T	TRANSISTOR SI NPN	
Q1506	2SD2396K	TRANSISTOR SI NPN	
Q1506	2SD23750P	TRANSISTOR SI NPN	
Q1507	2SD235800A	TRANSISTOR SI NPN	
Q1507	B1AAQB000002	TRANSISTOR SI NPN	
Q1507	B1BADC000001	TRANSISTOR SI NPN	

Ref. No.	Part No.	Part Name & Description	Remarks
Q1508	2SD0601AHL	TRANSISTOR SI NPN CHIP	
Q1508	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q1509	2SD06020RL	TRANSISTOR SI NPN CHIP	
Q1509	2SD0602ARL	TRANSISTOR SI NPN CHIP	
Q1509	2SD2432-R	TRANSISTOR SI NPN CHIP	
Q1510	B1BACC000010	TRANSISTOR SI NPN	
Q1510	2SD1581-T	TRANSISTOR SI NPN	
Q1511	2SD0601AHL	TRANSISTOR SI NPN CHIP	
Q1511	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q4701	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q4701	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5301	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q5301	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q5302	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5302	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5303	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5303	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5353	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5353	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5354	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5354	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5355	UNR221100L	TRANSISTOR SI NPN CHIP	
Q5355	DTC114EK-TX	TRANSISTOR SI NPN CHIP	
Q5381	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5381	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5901	2SD225900A	TRANSISTOR SI NPN	
Q6003	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q6003	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q6004	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q6004	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q6005	2SB0709A0L	TRANSISTOR SI PNP CHIP	
Q6005	B1ADCF000001	TRANSISTOR SI PNP CHIP	
Q6006	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q7002	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q7002	B1ABCF000020	TRANSISTOR SI NPN CHIP	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D401	B0AAML000001	DIODE SI	
D401	1SR139-400	DIODE SI	
D402	MA2C165001VT	DIODE SI	
D402	B0AACK000004	DIODE SI	
D402	1SS119	DIODE SI	
D503	B0HAGP000014	DIODE SI	
D504	MAZ40470MF	DIODE ZENER 4.7V	
D504	B0BA4R600003	DIODE ZENER 4.7V	
D504	RD4.7ESAB2	DIODE ZENER 4.7V	
D505	MA2C165001VT	DIODE SI	
D505	B0AACK000004	DIODE SI	
D505	1SS119	DIODE SI	
D553	B0HAGP000014	DIODE SI	
D554	B0AAEL000001	DIODE SI	
D554	MA2C16700E	DIODE SI	
D555	MAZ40680MF	DIODE ZENER 6.8V	
D555	B0BA6R600008	DIODE ZENER 6.8V	
D555	RD6.8ESAB3	DIODE ZENER 6.8V	
D555	04AZ6.8ZTPA7	DIODE ZENER 6.8V	
D558	B0HAGP000014	DIODE SI	
D591	D4DDD3R00002	THEARMISTOR	⚠
D592	MA2C16700E	DIODE SI	
D592	B0AAEL000001	DIODE SI	
D801	ERZV10V361CS	SUEGE ABSORBER	⚠
D801	D4EAA3610001	SURGE ABSORBER	⚠
D802	ERZV10V361CS	SUEGE ABSORBER	⚠
D802	D4EAA3610001	SURGE ABSORBER	⚠
D803	MA2C16700E	DIODE SI	
D803	B0AAEL000001	DIODE SI	
D804	B0AAKT000010	DIODE SI	⚠
D804	B0EAKT000027	DIODE SI	⚠
D804	B0EAKT000030	DIODE SI	⚠
D805	B0AAKT000010	DIODE SI	⚠
D805	B0EAKT000027	DIODE SI	⚠
D805	B0EAKT000030	DIODE SI	⚠
D806	B0AAKT000010	DIODE SI	⚠
D806	B0EAKT000027	DIODE SI	⚠
D806	B0EAKT000030	DIODE SI	⚠
D807	B0AAKT000010	DIODE SI	⚠
D807	B0EAKT000027	DIODE SI	⚠
D807	B0EAKT000030	DIODE SI	⚠
D854	B0JAMD000012	DIODE SI	
D854	B0JAGE000001	DIODE SI	
D854	B0JAME000082	DIODE SI	
D856	B0HAJL000001	DIODE SI	
D856	B0HAGP000012	DIODE SI	
D857	B0HAJL000001	DIODE SI	
D857	B0HAGP000012	DIODE SI	

Ref. No.	Part No.	Part Name & Description	Remarks
D858	B0HAJL000001	DIODE SI	
D858	B0HAGP000012	DIODE SI	
D859	B0JAPG000024	DIODE SI	
D859	B0JAPG000020	DIODE SI	
D859	B0JAPG000021	DIODE SI	
D860	B0EALR000005	DIODE SI	
D860	B0HAMR000063	DIODE SI	
D861	MA2180LA	DIODE ZENER 18V	⚠
D861	B0BA01800025	DIODE ZENER 18V	⚠
D861	1N4746A-T	DIODE ZENER 18V	⚠
D861	1N4746ARL	DIODE ZENER 18V	⚠
D863	B0HAHP000014	DIODE SI	
D863	B0HAJP000007	DIODE SI	
D863	B0HAMP000061	DIODE SI	
D863	B0HAMP000069	DIODE SI	
D1501	B0AAKT000010	DIODE SI	⚠
D1501	B0EAKT000027	DIODE SI	⚠
D1501	B0EAKT000030	DIODE SI	⚠
D1502	B0AAKT000010	DIODE SI	⚠
D1502	B0EAKT000027	DIODE SI	⚠
D1502	B0EAKT000030	DIODE SI	⚠
D1503	B0AAKT000010	DIODE SI	⚠
D1503	B0EAKT000027	DIODE SI	⚠
D1503	B0EAKT000030	DIODE SI	⚠
D1504	B0AAKT000010	DIODE SI	⚠
D1504	B0EAKT000027	DIODE SI	⚠
D1504	B0EAKT000030	DIODE SI	⚠
D1505	B0JAMD000012	DIODE SI	
D1505	B0JAGE000001	DIODE SI	
D1505	B0JAME000082	DIODE SI	
D1506	B0HAJL000001	DIODE SI	
D1506	B0HAGP000012	DIODE SI	
D1507	B0HAJL000001	DIODE SI	
D1507	B0HAGP000012	DIODE SI	
D1508	B0HAJL000001	DIODE SI	
D1508	B0HAGP000012	DIODE SI	
D1509	B0HAJL000001	DIODE SI	
D1509	B0HAGP000012	DIODE SI	
D1510	B0HAHP000014	DIODE SI	
D1510	B0HAJP000007	DIODE SI	
D1510	B0HAMP000061	DIODE SI	
D1510	B0HAMP000069	DIODE SI	
D1511	B0JANG000006	DIODE SI	
D1512	B0JANG000006	DIODE SI	
D1513	B0JBRD000006	DIODE SI	
D1514	B0JAME000079	DIODE SI	
D1514	B0JAME000049	DIODE SI	
D1514	B0JANE000011	DIODE SI	
D1514	B0JANE000022	DIODE SI	

D1514	D03ANL000022	DIODE SI	

Ref. No.	Part No.	Part Name & Description	Remarks
D1515	B0HAHP000014	DIODE SI	
D1515	B0HAJP000007	DIODE SI	
D1515	B0HAMP000061	DIODE SI	
D1515	B0HAMP000069	DIODE SI	
D1516	MAZ4100NHF	DIODE ZENER 10V	
D1516	RD10JSAB3	DIODE ZENER 10V	
D1518	MA4051N-HTA	DIODE ZENER 5.1V	
D1519	MAZ20820A	DIODE ZENER 8.2V	
D1519	MAZ20820	DIODE ZENER 8.2V	
D1519	MAZ20820B	DIODE ZENER 8.2V	
D1520	B0AAML000001	DIODE SI	
D1520	B0EAKL000008	DIODE SI	
D1522	B0AAML000001	DIODE SI	
D1522	B0EAKL000008	DIODE SI	
D1524	MA2180LA	DIODE ZENER 18V	⚠
D1524	B0BA01800025	DIODE ZENER 18V	⚠
D1524	1N4746A-T	DIODE ZENER 18V	⚠
D1524	1N4746ARL	DIODE ZENER 18V	⚠
D1525	MAZ4047NMF	DIODE ZENER 4.7V	
D1526	MA2C165001VT	DIODE SI	
D1526	B0AACK000004	DIODE SI	
D1526	1SS119	DIODE SI	
D1527	MA2C165001VT	DIODE SI	
D1527	B0AACK000004	DIODE SI	
D1527	1SS119	DIODE SI	
D1528	MAZ20620A	DIODE ZENER 6.2V	
D1528	MAZ20620	DIODE ZENER 6.2V	
D1528	MAZ20620B	DIODE ZENER 6.2V	
D4590	MAZ41300HF	DIODE ZENER 13V	
D4591	MAZ41300HF	DIODE ZENER 13V	
D4592	MAZ41300HF	DIODE ZENER 13V	
D4593	MAZ41300HF	DIODE ZENER 13V	
D4594	MA2C165001VT	DIODE SI	
D4594	B0AACK000004	DIODE SI	
D4594	1SS119	DIODE SI	
D4595	MA2C165001VT	DIODE SI	
D4595	B0AACK000004	DIODE SI	
D4595	1SS119	DIODE SI	
D4701	MA2C165001VT	DIODE SI	
D4701	B0AACK000004	DIODE SI	
D4701	1SS119	DIODE SI	
D4702	MA2C165001VT	DIODE SI	
D4702	B0AACK000004	DIODE SI	
D4702	1SS119	DIODE SI	
D4851	MA2C165001VT	DIODE SI	
D4851	B0AACK000004	DIODE SI	
D4851	1SS119	DIODE SI	
D4852	MA2C165001VT	DIODE SI	
D4852	B0AACK000004	DIODE SI	
D4852	1SS119	DIODE SI	
D4859	MA2C165001VT	DIODE SI	
D4859	B0AACK000004	DIODE SI	
D4859	1SS119	DIODE SI	

Ref. No.	Part No.	Part Name & Description	Remarks
D4860	MA2C165001VT	DIODE SI	
D4860	B0AACK000004	DIODE SI	
D4860	1SS119	DIODE SI	
D5304	MA2C165001VT	DIODE SI	
D5304	B0AACK000004	DIODE SI	
D5304	1SS119	DIODE SI	
D5307	MA2C165001VT	DIODE SI	
D5307	B0AACK000004	DIODE SI	
D5307	1SS119	DIODE SI	
D5308	MA2C165001VT	DIODE SI	
D5308	B0AACK000004	DIODE SI	
D5308	1SS119	DIODE SI	
D5353	MA2C165001VT	DIODE SI	
D5353	B0AACK000004	DIODE SI	
D5353	1SS119	DIODE SI	
D5354	MA2C165001VT	DIODE SI	
D5354	B0AACK000004	DIODE SI	
D5354	1SS119	DIODE SI	
D5501	MAZ40620L1KT	DIODE ZENER 6.2V	⚠
D5508	MA2C165001VT	DIODE SI	
D5508	B0AACK000004	DIODE SI	
D5508	1SS119	DIODE SI	
D6003	MA2C165001VT	DIODE SI	
D6003	B0AACK000004	DIODE SI	
D6003	1SS119	DIODE SI	
D6005	MA2C165001VT	DIODE SI	
D6005	B0AACK000004	DIODE SI	
D6005	1SS119	DIODE SI	
D6301	B3ABA0000400	LIGHT EMITTING DIODE GREEN	
D6302	B3ACA0000192	LIGHT EMITTING DIODE ORANGE	
D6303	B3AAA0000538	LIGHT EMITTING DIODE RED	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R401	ERDS2TJ471T	CARBON 1/4W 470	
R402	ERDS2TJ223	CARBON 1/4W 22K	
R409	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R410	ERDS2TJ392	CARBON 1/4W 3.9K	
R411	ERDS2TJ823T	CARBON 1/4W 82K	
R413	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R414	ERDS1FJ1R2P	CARBON 1/2W 1.2	⚠
R422	ERD25FJ101P	CARBON 1/4W 100	⚠
R427	ERDS1FJ1R5P	CARBON 1/2W 1.5	⚠
R431	ERDS2TJ821T	CARBON 1/4W 820	
R432	ERJ6GEYJ563V	MGF CHIP 1/10W 56K	
R433	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R434	ERDS2TJ472T	CARBON 1/4W 4.7K	
R435	ERDS2TJ102	CARBON 1/4W 1K	
R436	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R466	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R468	ERDS2TJ102	CARBON 1/4W 1K	
R471	ERDS1FJ152P	CARBON 1/2W 1.5K	⚠
R501	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R502	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R503	EROS2THF7501	PRECISION METAL FILM 1/4W 7.5K	⚠
R503	EROS2TKF7501	PRECISION METAL FILM 1/4W 7.5K	⚠
R503	VRESR4TF7501	PRECISION METAL FILM 1/4W 7.5K	⚠
R504	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R508	ERDS1FJ1R0P	CARBON 1/2W 1	⚠
R509	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R511	ERG2SJ222H	METAL OXIDE 2W 2.2K	
R512	ERDS2TJ122T	CARBON 1/4W 1.2K	
R513	ERDS2TJ472T	CARBON 1/4W 4.7K	
R516	LAR05222J09	W FLMPRF 5W 2.2K	
R519	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R524	ERDS2TJ103	CARBON 1/4W 10K	
R525	ERDS2TJ124T	CARBON 1/4W 120K	
R526	ERX2SJR75H	METAL OXIDE 2W 0.75	⚠
R529	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R531	ERDS2TJ562T	CARBON 1/4W 5.6K	
R552	ERDS2TJ822T	CARBON 1/4W 8.2K	
R553	ERDS2TJ102	CARBON 1/4W 1K	
R555	ERDS2TJ823T	CARBON 1/4W 82K	
R556	ERDS2TJ823T	CARBON 1/4W 82K	
R558	ERG2ANJ561H	METAL OXIDE 2W 560	
R561	ERQ1CKPR47S	FUSE 1W 0.47	⚠
R562	ERF5ZK3R9	W FLMPRF 5W 3.9K	
R571	ERDS2TJ101	CARBON 1/4W 100	
R572	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R573	ERDS2TJ101	CARBON 1/4W 100	
R574	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R591	ERDS2TJ103	CARBON 1/4W 10K	
R592	ERDS2TJ472T	CARBON 1/4W 4.7K	
R801	VRESC2TK825T	SOLID 1/2W 8.2M	⚠

Ref. No.	Part No.	Part Name & Description	Remarks
R802	ERDS2TJ472T	CARBON 1/4W 4.7K	
R803	ERDS2TJ103	CARBON 1/4W 10K	
R804	ERF5ZKR82	W FLMPRF 5W 0.82	⚠
R804	LSREFDWKR82Z	W FLMPRF 5W 0.82	⚠
R850	D0AF154JA038	CARBON 1/2W 150K	
R851	ERD2FCG681V	FUSE 1/4W 680	⚠
R852	ERDS2TJ683T	CARBON 1/4W 68K	
R853	ERDS2TJ683T	CARBON 1/4W 68K	
R855	ERX2SZJR10P	METAL FILM 2W 0.1	
R857	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R866	ERG2SJ333H	METAL OXIDE 2W 33K	
R1501	D0AF473JA038	CARBON 1/2W 47K	
R1502	ERD2FCG681V	FUSE 1/4W 680	⚠
R1503	ERX2SJR22P	METAL FILM 2W 0.22	
R1505	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R1507	ERJ6GEYJ122V	MGF CHIP 1/10W 1.2K	
R1508	ERG2SJ333H	METAL OXIDE 2W 33K	
R1510	ERDS2TJ750T	CARBON 1/4W 75	
R1511	ERD25FJ100P	CARBON 1/4W 10	⚠
R1511	ERD25FPJ100P	CARBON 1/4W 10	⚠
R1511	VRESF4FJ100P	CARBON 1/4W 10	⚠
R1512	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R1513	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R1514	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R1515	D1BD2431A016	MGF CHIP 2.43K	
R1516	D0HD222ZA002	MGF CHIP 2.2K	
R1517	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1518	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1519	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R1520	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R1521	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1522	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1523	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R1524	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R1525	ERDS2TJ331	CARBON 1/4W 330	
R1526	ERDS2TJ153	CARBON 1/4W 15K	
R1527	ERDS1TJ272T	CARBON 1/2W 2.7K	
R1528	ERDS2TJ153	CARBON 1/4W 15K	
R1529	ERG12SJ272P	METAL OXIDE 1/2W 2.7K	
R1530	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R1531	ERJ6GEYJ122V	MGF CHIP 1/10W 1.2K	
R1532	ERJ6GEYJ681V	MGF CHIP 1/10W 680	
R1534	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R1535	ERDS2T0	CARBON 1/4W 0	
R1536	ERDS2TJ153	CARBON 1/4W 15K	
R1537	ERDS2TJ153	CARBON 1/4W 15K	
R1538	ERJ6GEYJ681V	MGF CHIP 1/10W 680	
R1605	ERJ6GEYJ331V	MGF CHIP 1/10W 330	
R4171	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R4172	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4505	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R4506	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	

R4500	ERJ6GEYJ102V	MCR 10EZHF 1/10W 1K	

Ref. No.	Part No.	Part Name & Description	Remarks
R4524	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4525	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4526	ERJ6GEYJ152V	MGF CHIP 1/10W 1.5K	
R4527	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4528	ERJ6GEYJ683V	MGF CHIP 1/10W 68K	
R4531	ERJ6GEYJ274V	MGF CHIP 1/10W 270K	
R4591	ERDS2TJ331	CARBON 1/4W 330	
R4592	ERDS2TJ331	CARBON 1/4W 330	
R4593	ERDS2TJ331	CARBON 1/4W 330	
R4594	ERDS2TJ331	CARBON 1/4W 330	
R4702	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4704	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4705	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4706	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4707	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4792	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4793	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4851	ERJ6GEYJ750V	MGF CHIP 1/10W 75	
R4861	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4862	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4863	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4864	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R5301	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5302	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R5303	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R5304	ERJ6GEYJ393V	MGF CHIP 1/10W 39K	
R5305	ERJ6GEYJ224V	MGF CHIP 1/10W 220K	
R5306	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R5307	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R5308	ERJ6GEYJ393V	MGF CHIP 1/10W 39K	
R5309	ERJ6GEYJ184V	MGF CHIP 1/10W 180K	
R5310	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5311	ERJ6GEYJ331V	MGF CHIP 1/10W 330	
R5312	ERJ6GEYJ331V	MGF CHIP 1/10W 330	
R5313	ERJ6GEYJ331V	MGF CHIP 1/10W 330	
R5314	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R5315	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R5316	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R5317	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5318	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R5320	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5321	ERJ6GEYJ750V	MGF CHIP 1/10W 75	
R5324	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5326	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R5327	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5328	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5329	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5361	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R5362	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5363	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R5364	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5365	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5366	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5367	ERJ6GEYJ101V	MGF CHIP 1/10W 100	

Ref. No.	Part No.	Part Name & Description	Remarks
R5381	ERJ6GEYJ563V	MGF CHIP 1/10W 56K	
R5382	ERJ6GEYJ682V	MGF CHIP 1/10W 6.8K	
R5383	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R5401	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R5402	ERJ6GEYJ394V	MGF CHIP 1/10W 390K	
R5403	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R5405	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R5406	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5501	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R5502	ERJ6GEYJ394V	MGF CHIP 1/10W 390K	
R5503	ERDS2TJ471T	CARBON 1/4W 470	
R5504	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5505	ERJ6ENF3241V	MGF CHIP 1/10W 3.24K	⚠
R5506	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R5508	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R5510	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5511	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5512	ERJ6GEYJ151V	MGF CHIP 1/10W 150	
R5513	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5515	ERJ6GEYJ272V	MGF CHIP 1/10W 2.7K	
R5604	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R5605	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5614	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5615	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5902	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5932	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5933	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6001	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6002	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6003	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6004	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6005	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6006	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R6007	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R6008	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6010	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6011	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R6012	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R6013	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6014	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6015	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6016	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6017	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6018	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6019	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R6020	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6021	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6024	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6027	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6028	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R6030	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6031	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6035	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6040	ERJ6GEYJ101V	MGF CHIP 1/10W 100	

[illegible]	[illegible]	[illegible]	

Ref. No.	Part No.	Part Name & Description	Remarks
R6041	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6042	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6043	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6044	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6045	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6046	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6047	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6049	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R6050	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6053	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R6054	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6055	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6056	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6057	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6058	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6059	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R6061	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6062	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6063	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6064	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6066	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6067	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6077	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6078	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6080	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6081	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6082	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6090	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R6091	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R6092	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R6093	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6094	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6095	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6098	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6100	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6126	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R6127	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R6130	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6131	ERJ6GEYJ183V	MGF CHIP 1/10W 18K	
R6132	ERJ6GEYJ391V	MGF CHIP 1/10W 390	
R6133	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6134	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6135	ERJ6GEYJ475V	MGF CHIP 1/10W 4.7M	
R6136	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R6137	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R6138	ERDS2TJ560T	CARBON 1/4W 56	
R6143	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6144	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R6145	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R6146	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R6150	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R6160	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6161	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6162	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	

Ref. No.	Part No.	Part Name & Description	Remarks
R6163	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6164	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R6165	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R6166	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6171	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6205	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6207	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6208	ERJ6GEYJ152V	MGF CHIP 1/10W 1.5K	
R6301	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R6302	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R6303	ERJ6GEYJ183V	MGF CHIP 1/10W 18K	
R6304	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R6305	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R6306	ERJ6GEYJ123V	MGF CHIP 1/10W 12K	
R6307	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R6308	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R7001	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7002	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7003	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7004	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7006	ERJ6GEYJ271V	MGF CHIP 1/10W 270	
R7007	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7008	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R7009	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R7010	ERDS2TJ101	CARBON 1/4W 100	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C401	ECA1HM2R2B	ELECTROLYTIC 50V 2.2UF	
C402	ECA1CM471B	ELECTROLYTIC 16V 470UF	
C408	ECA1HGE010KB	ELECTROLYTIC 50V 1UF	
C409	ECA1VM221B	ELECTROLYTIC 35V 220UF	
C413	ECQB1H104KF3	POLYESTER 50V 0.1UF	
C414	ECA1EM102B	ELECTROLYTIC 25V 1000UF	
C418	ECA1VM331B	ELECTROLYTIC 35V 330UF	
C458	ECJ2VB1E103K	C CHIP 25V 0.01UF	
C510	ECKR2H102KB5	CERAMIC 500V 1000PF	
C513	ECA1HM100B	ELECTROLYTIC 50V 10UF	
C521	ECA1HM100B	ELECTROLYTIC 50V 10UF	
C523	ECA1CM101B	ELECTROLYTIC 16V 100UF	
C555	ECWH12H912JS	POLYESTER 1250V 9100PF	⚠
C555	ECWH16912JVB	POLYESTER 1600V 9100PF	⚠
C555	F0A3C912A002	POLYESTER 1250V 9100PF	⚠
C555	LSCFN12912JB	POLYESTER 1250V 9100PF	⚠
C556	ECWF2434JBB	POLYESTER 500V 0.43UF	
C558	ECA1VM331B	ELECTROLYTIC 35V 330UF	
C560	ECA2EM100B	ELECTROLYTIC 250V 10UF	⚠
C561	ECA1HM2R2B	ELECTROLYTIC 50V 2.2UF	
C563	F2A2D3300010	ELECTROLYTIC 200V 33UF	
C576	ECKW3D221KBP	CERAMIC 2KV 220PF	⚠

Ref. No.	Part No.	Part Name & Description	Remarks
C576	ECKC3D221KBP	CERAMIC 2KV 220PF	⚠
C801	ECQU2A823MLA	POLYESTER 250V 0.082UF	⚠
C801	LSCFQ2A823MC	POLYESTER 250V 0.082UF	⚠
C802	J0LE00000023	ARRESTER	⚠
C803	ECKATS103MF	CERAMIC 250V 0.01UF	⚠
C803	ECKETS103MF	CERAMIC 125V 0.01UF	⚠
C803	VCKST3G103MY	CERAMIC 250V 0.01UF	⚠
C803	VCKSU3D103MY	CERAMIC 125V 0.01UF	⚠
C806	VCKSRNG472ZX	CERAMIC 250V 4700PF	
C807	VCKSRNG472ZX	CERAMIC 250V 4700PF	
C808	VCKSRNG472ZX	CERAMIC 250V 4700PF	
C809	VCKSRNG472ZX	CERAMIC 250V 4700PF	
C855	ECA1HHG470B	ELECTROLYTIC 50V 47UF	
C856	ECJ2VB1H471K	C CHIP 50V 470PF	
C857	VCESAS2D331E	ELECTROLYTIC 200V 330UF	⚠
C857	ECEC2DP331BB	ELECTROLYTIC 200V 330UF	⚠
C857	F2A2D3310002	ELECTROLYTIC 200V 330UF	⚠
C857	F2B2D3310013	ELECTROLYTIC 200V 330UF	⚠
C858	ECKN3D222KBP	CERAMIC 2KV 2200PF	
C859	ECJ2VB1H122K	C CHIP 50V 1200PF	
C861	F1B2E152A012	ELECTROLYTIC 200V 1500PF	⚠
C861	F1B2E152A011	ELECTROLYTIC 200V 1500PF	⚠
C861	F1B2E152A044	ELECTROLYTIC 200V 1500PF	⚠
C861	F1B2E152A045	ELECTROLYTIC 200V 1500PF	⚠
C861	F1B2E1520002	ELECTROLYTIC 200V 1500PF	⚠
C861	F1B2E1520006	ELECTROLYTIC 200V 1500PF	⚠
C864	F1B3A102A009	CERAMIC 100V 1000PF	
C865	ECEA1PEE102	ELECTROLYTIC 18V 1000UF	
C867	VCESAS2D331E	ELECTROLYTIC 200V 330UF	⚠
C867	ECEC2DP331BB	ELECTROLYTIC 200V 330UF	⚠
C867	F2A2D3310002	ELECTROLYTIC 200V 330UF	⚠
C867	F2B2D3310013	ELECTROLYTIC 200V 330UF	⚠
C868	ECEA1PEE102	ELECTROLYTIC 18V 1000UF	
C869	ECKR2H221KB5	CERAMIC 500V 220PF	
C870	ECA2DHG4R7B	ELECTROLYTIC 200V 4.7UF	
C872	ECEA2DU820YE	ELECTROLYTIC 200V 82UF	⚠
C872	F2A2D8200001	ELECTROLYTIC 220V 82UF	⚠
C872	F2A2D8200003	ELECTROLYTIC 200V 82UF	⚠
C872	VCESR2D820XE	ELECTROLYTIC 200V 82UF	⚠
C1501	F1B2E101A009	ELECTROLYTIC 200V 100PF	⚠
C1501	F1B2E101A008	ELECTROLYTIC 200V 100PF	⚠
C1501	F1B2E101A032	ELECTROLYTIC 200V 100PF	⚠
C1501	F1B2E101A037	ELECTROLYTIC 200V 100PF	⚠

Ref. No.	Part No.	Part Name & Description	Remarks
C1502	ECKATS103MF	CERAMIC 250V 0.01UF	⚠
C1502	ECKETS103MF	CERAMIC 125V 0.01UF	⚠
C1502	VCKST3G103MY	CERAMIC 250V 0.01UF	⚠
C1502	VCKSU3D103MY	CERAMIC 125V 0.01UF	⚠
C1503	ECKATS103MF	CERAMIC 250V 0.01UF	⚠
C1503	VCKSEKD103PZ	CERAMIC 125V 0.01UF	⚠
C1503	VCKSEMD103PZ	CERAMIC 125V 0.01UF	⚠
C1503	VCKSGKD103QZ	CERAMIC 125V 0.01UF	⚠
C1503	VCKSGMD103QZ	CERAMIC 125V 0.01UF	⚠
C1503	VCKSTKG103ZY	CERAMIC 125V 0.01UF	⚠
C1503	VCKSTMG103ZY	CERAMIC 125V 0.01UF	⚠
C1503	VCKSUKD103MY	CERAMIC 125V 0.01UF	⚠
C1503	VCKSUMD103MY	CERAMIC 125V 0.01UF	⚠
C1504	F1B2E152A012	CERAMIC 250V 1500PF	⚠
C1504	F1B2E152A011	CERAMIC 250V 1500PF	⚠
C1504	F1B2E152A044	CERAMIC 250V 1500PF	⚠
C1504	F1B2E152A045	CERAMIC 250V 1500PF	⚠
C1504	F1B2E1520002	CERAMIC 250V 1500PF	⚠
C1504	F1B2E1520006	CERAMIC 250V 1500PF	⚠
C1505	ECA1HHG470B	ELECTROLYTIC 50V 47UF	
C1506	ECJ2VC1H471J	C CHIP 50V 470PF	
C1507	ECEA2DU121YE	ELECTROLYTIC 200V 120UF	⚠
C1507	F2A2D1210001	ELECTROLYTIC 200V 120UF	⚠
C1507	F2A2D1210003	ELECTROLYTIC 200V 120UF	⚠
C1507	VCESR2D121XE	ELECTROLYTIC 200V 120UF	⚠
C1508	F1B3D152A010	CERAMIC 2KV 1500PF	
C1509	ECKR2H221KB5	CERAMIC 500V 220PF	
C1510	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C1511	ECA2DHG4R7B	ELECTROLYTIC 200V 4.7UF	
C1512	ECJ2VB1H821K	C CHIP 50V 820PF	
C1515	ECUV1H101KBN	C CHIP 50V 100PF	
C1516	ECEA1PEE331	ELECTROLYTIC 18V 330UF	
C1517	ECEA1PEE331	ELECTROLYTIC 18V 330UF	
C1518	ECA1HHG470B	ELECTROLYTIC 50V 47UF	
C1519	EEUFC0J152S	ELECTROLYTIC 6.3V 1500UF	
C1520	ECEA1PEE331	ELECTROLYTIC 18V 330UF	
C1521	ECJ2VB1C224K	C CHIP 16V 0.22UF	
C1522	ECA1CM101B	ELECTROLYTIC 16V 100UF	
C1523	ECA0JM102B	ELECTROLYTIC 6.3V 1000UF	
C1525	ECA0JM102B	ELECTROLYTIC 6.3V 1000UF	
C1526	ECEA1CKA100B	ELECTROLYTIC 16V 10UF	
C1527	ECA0JM102B	ELECTROLYTIC 6.3V 1000UF	
C1528	ECEA1CKA100B	ELECTROLYTIC 16V 10UF	
C1530	ECEA1CKA470B	ELECTROLYTIC 16V 47UF	
C1531	ECJ2YB1C334K	C CHIP 16V 0.33UF	
C1533	ECEA1HKAR47B	ELECTROLYTIC 50V 0.47UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C1535	ECEA1CKA470B	ELECTROLYTIC 16V 47UF	
C1537	ECEA1HKAR47B	ELECTROLYTIC 50V 0.47UF	
C1538	ECEA1CKA100B	ELECTROLYTIC 16V 10UF	
C1539	ECEA0JEE101B	ELECTROLYTIC 6.3V 100UF	
C1540	ECA0JM101B	ELECTROLYTIC 6.3V 100UF	
C1541	ECEA1CKA100B	ELECTROLYTIC 16V 10UF	
C1542	ECA1CM471B	ELECTROLYTIC 16V 470UF	
C1545	ECA1CM331B	ELECTROLYTIC 16V 330UF	
C1546	ECJ2FB0J106M	C CHIP 6.3V 10UF	
C1547	ECJ2FB0J106M	C CHIP 6.3V 10UF	
C1548	ECJ2YB1H104K	C CHIP 50V 0.1UF	
C1549	ECEA1PEE331	ELECTROLYTIC 18V 330UF	
C1550	ECEA1CKA100B	ELECTROLYTIC 16V 10UF	
C1552	ECEA1HKAR47B	ELECTROLYTIC 50V 0.47UF	
C1553	ECEA1CKA100B	ELECTROLYTIC 16V 10UF	
C1555	ECJ2FB1C105K	C CHIP 16V 1UF	
C1556	ECJ2FB0J106M	C CHIP 6.3V 10UF	
C1557	ECJ2FB0J106M	C CHIP 6.3V 10UF	
C1605	ECJ2VC1H270J	C CHIP 50V 27PF	
C1606	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C1607	ECEA1EKA4R7B	ELECTROLYTIC 25V 4.7UF	
C4171	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4518	ECA1CM471B	ELECTROLYTIC 16V 470	
C4520	ECA1CM471B	ELECTROLYTIC 16V 470	
C4527	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4528	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4529	ECEA1CKA220	ELECTROLYTIC 16V 22UF	
C4530	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C4531	ECJ2VB1H332K	C CHIP 50V 3300PF	
C4532	ECJ2VB1H332K	C CHIP 50V 3300PF	
C4591	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C4592	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C4701	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4702	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4703	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4704	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4707	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4708	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4861	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4863	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5301	ECEA1CKN100I	ELECTROLYTIC 16V 10UF	
C5302	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C5303	ECEA1HKAR47	ELECTROLYTIC 50V 0.47UF	
C5305	ECEA1HKAR47	ELECTROLYTIC 50V 0.47UF	
C5306	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5307	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5361	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5362	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5363	ECJ2VC1H220J	C CHIP 50V 22PF	
C5367	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5401	VCUSTBC224KB	C CHIP 16V 0.22UF	
C5402	ECJ2VB1H222K	C CHIP 50V 2200PF	
C5403	ECEA1HKA2R2	ELECTROLYTIC 50V 2.2UF	
C5501	ECJ2VB1E183K	C CHIP 25V 0.018UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C5502	ECJ2VB1H681K	C CHIP 50V 680PF	
C5505	ECA1CM221	ELECTROLYTIC 16V 220UF	
C5506	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5507	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5508	ECUV1H221JSN	C CHIP 50V 220PF	
C5510	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C5511	ECJ2VB1E333K	C CHIP 25V 0.033UF	
C5516	ECJ2VB1E333K	C CHIP 25V 0.033UF	
C5601	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5602	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C5603	ECJ2VC1H150J	C CHIP 50V 15PF	
C5604	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C5605	ECJ2VB1E153K	C CHIP 25V 0.015UF	
C5606	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5607	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5609	ECJ2VC1H220J	C CHIP 50V 22PF	
C5610	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C5902	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C5903	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C5904	ECJ2VB1C104K	C CHIP 16V 0.1UF	
C5905	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C5906	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5932	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C6001	ECEA0JKA331B	ELECTROLYTIC 6.3V 330UF	
C6002	ECJ2VC1H080C	C CHIP 50V 8PF	
C6003	ECJ2VC1H100C	C CHIP 50V 10PF	
C6004	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C6006	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C6009	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C6013	ECJ2VC1H101J	C CHIP 50V 100PF	
C6017	ECJ2VC1H101J	C CHIP 50V 100PF	
C6018	ECJ2VC1H101J	C CHIP 50V 100PF	
C6020	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C6021	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C6029	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C6044	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C6050	ECJ2VC1H181J	C CHIP 50V 180PF	
C6212	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C6213	ECEA0JKA331	ELECTROLYTIC 6.3V 330UF	
C6302	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C6401	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C6402	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C6403	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C6404	ECJ2VC1H121J	C CHIP 50V 120PF	
C6406	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C6408	ECJ2VB1H222K	C CHIP 50V 2200PF	
C6410	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C7002	ECJ2VB1H102K	C CHIP 50V 1000PF	
C7006	ECA0JM102B	ELECTROLYTIC 6.3V 1000UF	
C7007	ECJ2VB1H102K	C CHIP 50V 1000PF	
C7008	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C7010	ECEA1HKA010	ELECTROLYTIC 50V 1UF	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L551	ELH5L4145	COIL	⚠
L551	ELH5L4108	COIL	⚠
L551	G0D510000001	COIL	⚠
L801	ELF21V025A	LINE FILTER	⚠
L801	J0HBLH000001	LINE FILTER	⚠
L802	ELF21V025A	LINE FILTER	⚠
L802	J0HBLH000001	LINE FILTER	⚠
L850	J0JKA0000015	COIL	
L855	G0A100YA0001	COIL	
L856	VLQSAB7D220K	COIL 22UH	
L857	J0JHB0000021	FILTER	
L1501	ELF15N005A	LINE FILTER	⚠
L1502	J0JHB0000021	FILTER	
L1503	J0JHB0000021	FILTER	
L1504	VLQSAB7D220K	COIL 22UH	
L1505	VLQSAB7D100K	COIL 10UH	
L1506	ELEXT101KE04	COIL 100UH	
L1507	G0A100YA0001	COIL	
L1509	VLQSAB7D220K	COIL 22UH	
L1510	G0A100YA0001	COIL	
L1601	LSLF0035	EMI FILTER CHIP	
L1603	LSLF0035	EMI FILTER CHIP	
L1604	ELESN220KA	COIL 22UH	
L4701	ELESN101KA	COIL 100UH	
L5301	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
L5302	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
L5303	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
L5901	ELESN101KA	COIL 100UH	
L6401	ELEXT101KE04	COIL 100UH	
L6402	J0JBC0000022	CHIP BEAD INDUCTOR	
L6403	J0JBC0000022	CHIP BEAD INDUCTOR	
L6404	J0JBC0000022	CHIP BEAD INDUCTOR	
L6405	J0JBC0000022	CHIP BEAD INDUCTOR	
L7002	ELESN100KA	COIL 10UH	

CRYSTAL OSCILLATOR

Ref. No.	Part No.	Part Name & Description	Remarks
X5501	H2A503300012	CRYSTAL OSCILLATOR	
X5601	VSXS0208-A	CRYSTAL OSCILLATOR	
X6001	VSXS0784	CRYSTAL OSCILLATOR	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P552	K1MP04A00007	CONNECTOR 4P	
P801	LSJP0814	CONNECTOR 2P	
P850	K1KA02A00009	CONNECTOR 2P	
P1529	VEKS5894-FE	CONNECTOR CABLE W/PLUG,5V DC	
P4501	K1KA02A00229	CONNECTOR 2P	
P4502	K1KA02A00229	CONNECTOR 2P	
P4506	VEKS5886	CONNECTOR CABLE W/PLUG,12V DC	
P4801	K1MN16A00060	CONNECTOR 16P	
P5301	K1MP04A00006	CONNECTOR 4P	
P6001	K1KA05A00268	CONNECTOR 5P	

SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW6002	K0N107C00002	DIGITAL ROTARY SWITCH	
SW6301	EVQ21405R	SWITCH PUSH	
SW6302	EVQ21405R	SWITCH PUSH	
SW6304	EVQ21405R	SWITCH PUSH	
SW6305	EVQ21405R	SWITCH PUSH	
SW6309	EVQ21405R	SWITCH PUSH	
SW6310	EVQ21405R	SWITCH PUSH	
SW6311	EVQ21405R	SWITCH PUSH	
SW6312	EVQ21405R	SWITCH PUSH	
SW6313	EVQ21405R	SWITCH PUSH	
SW6314	EVQ21405R	SWITCH PUSH	
SW6315	EVQ21405R	SWITCH PUSH	

FUSE& PROTECTOR

Ref. No.	Part No.	Part Name & Description	Remarks
F801	K5D632AQ0002	FUSE 125V 6.3A	⚠
F801	K5D632ADA001	FUSE 125V 6.3A	⚠
F801	K5D632ADA008	FUSE 125V 6.3A	⚠
F801	K5D632AD0002	FUSE 125V 6.3A	⚠
F1501	K5D302AQ0003	FUSE 125V 3A	⚠
F1501	K5D302ADA002	FUSE 125V 3A	⚠
F1501	K5D302ADA006	FUSE 125V 3A	⚠
F1501	K5D302AD0002	FUSE 125V 3A	⚠
PR850	LSSF009A70E	IC PROTECTOR	⚠
PR851	LSSF009A35E	IC PROTECTOR	⚠
PR1501	UNH000600A	IC PROTECTOR 1.5A	⚠
PR1501	B1ZAZ0000040	IC PROTECTOR 1.5A	⚠
PR1501	LSSF009A25E	IC PROTECTOR 1.5A	⚠
PR1502	UNH000600A	IC PROTECTOR 1.5A	⚠
PR1502	B1ZAZ0000040	IC PROTECTOR 1.5A	⚠
PR1502	LSSF009A25E	IC PROTECTOR 1.5A	⚠
PR1503	UNH000600A	IC PROTECTOR 1.5A	⚠
PR1503	B1ZAZ0000040	IC PROTECTOR 1.5A	⚠

Ref. No.	Part No.	Part Name & Description	Remarks
PR1503	LSSF009A25E	IC PROTECTOR 1.5A	⚠
PR1504	LSSF009A35E	IC PROTECTOR	⚠

RELAY

Ref. No.	Part No.	Part Name & Description	Remarks
RL591	LSSY0004	RELAY	⚠
RL591	K6B1AGA00034	RELAY	⚠
RL591	K6B1AGA00042	RELAY	⚠
RL591	TSEH0013	RELAY	⚠
RL591	TSEH1860-1	RELAY	⚠
RL801	LSSY0004	RELAY	⚠
RL801	K6B1AGA00034	RELAY	⚠
RL801	K6B1AGA00042	RELAY	⚠
RL801	TSEH0013	RELAY	⚠
RL801	TSEH1860-1	RELAY	⚠

TRANSFORMER

Ref. No.	Part No.	Part Name & Description	Remarks
T501	ETH09K8AZ	TRANSFORMER	
T551	KFT3AB400FU	FLYBACK TRANSFORMER	⚠
T850	LSTP0124	TRANSFORMER	⚠
T1501	LSTP0125	TRANSFORMER	⚠

JACKS

Ref. No.	Part No.	Part Name & Description	Remarks
JK4591	K2HC103B0129	EARPHONE JACK SOCKET	
JK4701	K2HA306B0058	AUDIO/VIDEO JACK SOCKET	
JK4851	LSJJ0167	AUDIO/VIDEO JACK SOCKET	

PRINTED CIRCUIT BOARD ASSEMBLY

Ref. No.	Part No.	Part Name & Description	Remarks
E11	LSEP2120A	AUDIO C.B.A.	E.S.D. RTL
E12	LSEP2086A	OPTICAL AUDIO JACK C.B.A.	RTL
E13	LSEP2119A	Y/C SEPARATION C.B.A.	RTL

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
155	TMM76403-1	CLAMPER	
470	XTV3+10G	TAPPING SCREW,STEEL	
483	XYN3+F10S	SCREW W/WASHER,STEEL	
487	XYN3+J8	SCREW W/WASHER,STEEL	
711	PNA4611M00HC	INFRARED RECEIVER UNIT	
728	LUS63008A	HEAT SINK	
741	LSJA03492017	AC CORD W/PLUG,120V	⚠
743	ENG36715G	TUNER,UHF/VHF NR	
751	LML69001A	ANODE LEAD CLAMPER	
760	TUC77628	HEAT SINK	
771	EYF52BC	FUSE HOLDER	
772	LSSC0408	HEAT SINK	
797	LSSC0529	HEAT SINK	
799	LSSC0584	AMP HEAT SINK	

12.3.2. AUDIO C.B.A.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC4301	C0JBAR000002	IC, CMOS STANDARD LOGIC	E.S.D.
IC4301	CD4052BCM	IC, CMOS STANDARD LOGIC	E.S.D.
IC4303	C0JBAR000002	IC, CMOS STANDARD LOGIC	E.S.D.
IC4303	CD4052BCM	IC, CMOS STANDARD LOGIC	E.S.D.
IC4352	C0ABBB000017	IC, LINEAR	
IC4352	C1BB00000177	IC, LINEAR	
IC4601	BD3867AS	IC, LINEAR	
IC9001	AN5832SA-E1	IC, LINEAR	
IC9201	AN7420-NT	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q4301	UNR221200L	TRANSISTOR SI NPN CHIP	
Q4301	B1GBCFLL0002	TRANSISTOR SI NPN CHIP	
Q4302	UNR221200L	TRANSISTOR SI NPN CHIP	
Q4302	B1GBCFLL0002	TRANSISTOR SI NPN CHIP	
Q4303	UNR221200L	TRANSISTOR SI NPN CHIP	
Q4303	B1GBCFLL0002	TRANSISTOR SI NPN CHIP	
Q4304	UNR221200L	TRANSISTOR SI NPN CHIP	
Q4304	B1GBCFLL0002	TRANSISTOR SI NPN CHIP	
Q4351	2SD132800L	TRANSISTOR SI NPN CHIP	
Q4351	B1ABEC000006	TRANSISTOR SI NPN CHIP	
Q4352	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q4352	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q4353	2SD132800L	TRANSISTOR SI NPN CHIP	
Q4353	B1ABEC000006	TRANSISTOR SI NPN CHIP	
Q4354	UNR211L00L	TRANSISTOR SI PNP CHIP	
Q4355	UNR221L00L	TRANSISTOR SI NPN CHIP	
Q9001	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q9001	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q9002	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q9002	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q9201	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q9201	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q9202	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q9202	B1ABCF000020	TRANSISTOR SI NPN CHIP	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D4351	MA2C165001VT	DIODE SI	
D4351	B0AACK000004	DIODE SI	
D4351	1SS119	DIODE SI	
D4352	MA2C165001VT	DIODE SI	
D4352	B0AACK000004	DIODE SI	
D4352	1SS119	DIODE SI	
D4353	MA2C165001VT	DIODE SI	
D4353	B0AACK000004	DIODE SI	
D4353	1SS119	DIODE SI	
D4354	MA2C165001VT	DIODE SI	
D4354	B0AACK000004	DIODE SI	
D4354	1SS119	DIODE SI	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R4302	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4303	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4304	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4305	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4306	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4307	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4309	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4310	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4311	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4312	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4318	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4319	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4320	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4321	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4322	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4323	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4352	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4353	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4354	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4355	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4356	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R4357	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R4358	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4362	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4365	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4366	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4368	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4369	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R4370	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4371	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R4372	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4374	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4375	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4376	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4377	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4378	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4379	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4601	ERJ6GEYJ105V	MGF CHIP 1/10W 1M	
R4602	ERJ6GEYJ394V	MGF CHIP 1/10W 390K	
R4603	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4604	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4605	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4606	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4607	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R4608	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R9001	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R9002	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R9003	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R9004	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R9005	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R9009	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R9010	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R9013	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R9014	ERJ6GEY0R00V	MGF CHIP 1/10W 0	

Ref. No.	Part No.	Part Name & Description	Remarks
R9201	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R9202	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R9203	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R9204	ERJ6GEYJ224V	MGF CHIP 1/10W 220K	
R9205	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R9206	EVMAASA00B53	VARIABLE 5K	
R9207	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R9208	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R9209	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R9212	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R9213	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R9214	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R9215	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R9216	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R9217	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C4301	ECEA1CKA101	ELECTROLYTIC 16V 100UF	
C4302	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4303	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4304	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4308	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4352	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4353	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4354	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4355	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C4356	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4357	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4358	ECEA1CKN100I	ELECTROLYTIC 16V 10UF	
C4359	ECEA1CKN100I	ELECTROLYTIC 16V 10UF	
C4361	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4362	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4365	ECEA1CKA101	ELECTROLYTIC 16V 100UF	
C4366	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4601	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4602	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4603	ECJ2VB1E683K	C CHIP 25V 0.068UF	
C4604	ECJ2VB1H102K	C CHIP 50V 1000PF	
C4605	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4606	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4612	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4613	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4614	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4615	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4616	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C4617	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C4618	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4619	ECJ2VB1H102K	C CHIP 50V 1000PF	
C4620	ECJ2VB1E683K	C CHIP 25V 0.068UF	
C4621	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4622	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4623	ECA1CM471B	ELECTROLYTIC 16V 470	

Ref. No.	Part No.	Part Name & Description	Remarks
C9001	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C9002	ECEA1HKAR33I	ELECTROLYTIC 50V 0.33UF	
C9003	ECEA1HKA3R3	ELECTROLYTIC 50V 3.3UF	
C9004	ECJ2VB1C104K	C CHIP 16V 0.1UF	
C9005	ECJ2VB1E223K	C CHIP 25V 0.022UF	
C9006	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C9007	ECJ2VB1H333K	C CHIP 50V 0.033UF	
C9008	ECEA1HKA2R2	ELECTROLYTIC 50V 2.2UF	
C9009	ECEA1HKAR33I	ELECTROLYTIC 50V 0.33UF	
C9010	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C9011	ECJ2VF1C224Z	C CHIP 16V 0.22UF	
C9013	ECJ2VB1H102K	C CHIP 50V 1000PF	
C9014	ECEA1HKA4R7	ELECTROLYTIC 50V 4.7UF	
C9015	ECEA1HKA2R2	ELECTROLYTIC 50V 2.2UF	
C9016	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C9017	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C9019	ECEA1HKA2R2	ELECTROLYTIC 50V 2.2UF	
C9022	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C9024	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C9025	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C9201	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C9202	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C9203	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C9204	ECQP1H102JZ3	POLYESTER 50V 1000PF	
C9205	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C9206	ECEA1HKA3R3	ELECTROLYTIC 50V 3.3UF	
C9207	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C9208	ECJ2VB1E223K	C CHIP 25V 0.022UF	
C9209	ECJ2VB1E223K	C CHIP 25V 0.022UF	
C9210	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C9211	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C9212	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C9213	ECEA1CKA220	ELECTROLYTIC 16V 22UF	
C9214	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C9215	ECEA1HKA010	ELECTROLYTIC 50V 1UF	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L4351	ELESN101KA	COIL 100UH	
L4601	ELESN101KA	COIL 100UH	
L9001	ELESN101KA	COIL 100UH	
L9201	ELESN101KA	COIL 100UH	
L9202	ELESN101KA	COIL 100UH	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P4201	VJHS0293	PACK PIN 3P	
P4202	VJHS0297	PACK PIN 7P	
P4203	VJHS0293	PACK PIN 3P	
P4204	VJHS0297	PACK PIN 7P	
P4205	VJHS0293	PACK PIN 3P	
P4206	VJHS0293	PACK PIN 3P	
P4207	VJHS0297	PACK PIN 7P	
P4208	VJHS0297	PACK PIN 7P	
P4209	VJHS0297	PACK PIN 7P	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
713	VMAS1912	P.C.B. SUPPORT ANGLE	

12.3.3. OPTICAL AUDIO JACK C.B.A.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC4751	B3RAE0000007	IC, JACK OPTICAL OUTPUT	
IC4751	B3RAE0000026	IC, JACK OPTICAL OUTPUT	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P4751	VJHS0293	PACK PIN 3P	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
713	VMAS1912	P.C.B. SUPPORT ANGLE	

12.3.4. Y/C SEPARATION C.B.A.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC5651	C1AB00001288	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q5651	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q5651	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q5652	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5652	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5653	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q5653	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q5655	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5655	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5656	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5656	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5657	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5657	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5658	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5658	B1ABCF000020	TRANSISTOR SI NPN CHIP	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R5651	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R5652	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5653	ERJ6GEYJ682V	MGF CHIP 1/10W 6.8K	
R5654	ERJ6GEYJ152V	MGF CHIP 1/10W 1.5K	
R5655	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5656	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R5657	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R5659	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5660	ERJ6GEYJ821V	MGF CHIP 1/10W 820	
R5661	ERJ6GEYJ391V	MGF CHIP 1/10W 390	
R5662	ERJ6GEYJ391V	MGF CHIP 1/10W 390	
R5663	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R5665	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5666	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R5668	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5670	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5674	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R5675	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R5676	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R5677	ERJ6GEYJ122V	MGF CHIP 1/10W 1.2K	
R5678	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R5679	ERJ6GEYJ101V	MGF CHIP 1/10W 100	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C5652	ECJ2VC1H100C	C CHIP 50V 10PF	
C5653	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5654	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C5655	ECJ2VC1H270J	C CHIP 50V 27PF	
C5656	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C5657	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C5658	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5659	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5660	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5661	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C5662	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C5663	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5664	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5665	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5666	ECEA0JKA220	ELECTROLYTIC 6.3V 22UF	
C5668	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5669	ECJ2VC1H181J	C CHIP 50V 180PF	
C5670	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5671	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5672	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5673	ECJ2VC1H560J	C CHIP 50V 56PF	
C5674	ECJ2VC1H390J	C CHIP 50V 39PF	
C5675	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C5676	ECEA1CKA220	ELECTROLYTIC 16V 22UF	
C5677	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C5678	ECEA1CKS220I	ELECTROLYTIC 16V 22UF	
C5680	ECJ2VC1H270J	C CHIP 50V 27PF	
C5681	ECJ2VF1H103Z	C CHIP 50V 0.01UF	

FILTERS

Ref. No.	Part No.	Part Name & Description	Remarks
FL5651	LSLF0053	EMI FILTER	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L5652	ELESN150KA	COIL 15UH	
L5653	LSLQF06R101K	COIL 100UH	
L5654	ELESN4R7KA	COIL 4.7UH	
L5655	ELESN101KA	COIL 100UH	
L5656	ELESN101KA	COIL 100UH	
L5657	ELESN101KA	COIL 100UH	
L5658	ELESN101KA	COIL 100UH	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P5651	VJHS0293	PACK PIN 3P	
P5652	VJHS0297	PACK PIN 7P	

12.3.5. CRT C.B.A.

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q351	2SC3063	TRANSISTOR SI NPN	
Q351	2SC3271F-N	TRANSISTOR SI NPN	
Q351	2SC3619	TRANSISTOR SI NPN	
Q352	2SC3063	TRANSISTOR SI NPN	
Q352	2SC3271F-N	TRANSISTOR SI NPN	
Q352	2SC3619	TRANSISTOR SI NPN	
Q353	2SC3063	TRANSISTOR SI NPN	
Q353	2SC3271F-N	TRANSISTOR SI NPN	
Q353	2SC3619	TRANSISTOR SI NPN	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D351	MAZ41500MF	DIODE ZENER 15V	
D351	B0BA01400041	DIODE ZENER 15V	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R351	ERG2ANJ153H	METAL OXIDE 2W 15K	
R352	ERG2ANJ153H	METAL OXIDE 2W 15K	
R353	ERG2ANJ153H	METAL OXIDE 2W 15K	
R354	ERD25TJ272T	CARBON 1/4W 2.7K	
R355	ERD25TJ272T	CARBON 1/4W 2.7K	
R356	ERD25TJ272T	CARBON 1/4W 2.7K	
R357	ERDS2TJ392	CARBON 1/4W 3.9K	
R358	ERDS2TJ392	CARBON 1/4W 3.9K	
R359	ERDS2TJ392	CARBON 1/4W 3.9K	
R360	ERDS2TJ391T	CARBON 1/4W 390	
R361	ERDS2TJ391T	CARBON 1/4W 390	
R362	ERDS2TJ391T	CARBON 1/4W 390	
R363	ERDS2TJ121T	CARBON 1/4W 120	
R364	ERDS2TJ121T	CARBON 1/4W 120	
R365	ERDS2TJ121T	CARBON 1/4W 120	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C351	F1D1H471A012	CERAMIC 50V 470PF	
C352	F1D1H471A012	CERAMIC 50V 470PF	
C353	F1D1H561A012	CERAMIC 50V 560PF	
C354	F1B3D1020008	CERAMIC 2KV 1000PF	
C357	ECA1CM220B	ELECTROLYTIC 16V 22UF	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P351	LSJWR4N440AC	CONNECTOR CABLE W/OUT PLUG,12V DC	
P352	LSJWS4N400AC	CONNECTOR CABLE W/OUT PLUG,220V DC	
P353	K3B09CA00005	CRT SOCKET	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
153	TMM7443-1	CLAMPER	

12.3.6. DVD MAIN C.B.A.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC8001	MN2DS0002VP	IC, LINEAR	
IC8002	LSSK0024	IC, 4K EEP ROM	E.S.D.
IC8003	C1DB00000918	IC, LINEAR	
IC8005	C0DBZFZ00011	IC, LINEAR	
IC8005	C0DBZFZ00010	IC, LINEAR	
IC8201	LSSK0020	IC, 16MBIT FLASH MEMORY	E.S.D.
IC8202	C0JBAH000074	IC, CMOS STANDARD LOGIC	E.S.D.
IC8202	C0JBAH000078	IC, CMOS STANDARD LOGIC	E.S.D.
IC8203	C0JBAH000074	IC, CMOS STANDARD LOGIC	E.S.D.
IC8203	C0JBAH000078	IC, CMOS STANDARD LOGIC	E.S.D.
IC8204	C3ABQJ000001	IC, 128MBIT SD RAM	E.S.D.
IC8204	C3ABQJ000005	IC, 128MBIT SD RAM	E.S.D.
IC8204	C3ABQJ000012	IC, 128MBIT SD RAM	E.S.D.
IC8501	C0FBBK000035	IC, LINEAR	
IC8503	AN6552S	IC, LINEAR	
IC8801	C0GBL0000003	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q8401	2SB1218ARL	TRANSISTOR SI PNP CHIP	
Q8402	2SB1218ARL	TRANSISTOR SI PNP CHIP	
Q8403	2SB1218ARL	TRANSISTOR SI PNP CHIP	
Q8404	2SB1218ARL	TRANSISTOR SI PNP CHIP	
Q8601	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q8601	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q8602	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q8602	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q8603	2SB14400RL	TRANSISTOR SI PNP CHIP	
Q8603	2SB14400SL	TRANSISTOR SI PNP CHIP	
Q8901	UNR521100L	TRANSISTOR SI NPN CHIP	
Q8901	B1GBCFJJ0007	TRANSISTOR SI NPN CHIP	
Q8902	UNR511500L	TRANSISTOR SI PNP CHIP	
Q8902	B1GDCFJJ0025	TRANSISTOR SI PNP CHIP	
Q8905	B1CFGD000002	TRANSISTOR FET CHIP	
Q8905	XP0187800L	TRANSISTOR FET CHIP	
Q8906	2SB0709A0L	TRANSISTOR SI PNP CHIP	
Q8906	B1ADCF000001	TRANSISTOR SI PNP CHIP	
Q8907	2SB0709A0L	TRANSISTOR SI PNP CHIP	
Q8907	B1ADCF000001	TRANSISTOR SI PNP CHIP	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R8001	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R8002	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R8004	ERJ12YJ1R0U	MGF CHIP 1/2W 1	
R8005	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R8013	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R8014	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R8017	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8020	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8021	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8022	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8023	ERJ3GEYJ270V	MGF CHIP 1/16W 27	
R8024	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8028	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8031	ERJ3GEYF153V	MGF CHIP 1/16W 15K	
R8032	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R8033	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R8034	ERJ3GEYF153V	MGF CHIP 1/16W 15K	
R8036	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8042	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8043	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8044	EVM3YSX50B23	VARIABLE 2K	
R8045	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8048	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8049	ERJ3GEYJ561V	MGF CHIP 1/16W 560	
R8050	ERJ3GEYJ561V	MGF CHIP 1/16W 560	
R8051	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8202	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8212	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8213	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8223	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8226	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8230	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8235	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8239	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R8241	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R8242	EXB38V100JV	ARRAY CHIP 1/16W 10	
R8244	EXB38V100JV	ARRAY CHIP 1/16W 10	
R8248	EXB38V100JV	ARRAY CHIP 1/16W 10	
R8249	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R8253	EXB38V100JV	ARRAY CHIP 1/16W 10	
R8259	EXB38V100JV	ARRAY CHIP 1/16W 10	
R8263	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8267	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8268	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8272	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8401	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8402	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8403	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8404	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8405	ERJ3GEYJ302V	MGF CHIP 1/16W 3K	
R8406	ERJ3GEYJ302V	MGF CHIP 1/16W 3K	
R8409	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8410	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8423	ERJ3GEYJ101V	MGF CHIP 1/16W 100	

Ref. No.	Part No.	Part Name & Description	Remarks
R8424	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8425	ERJ3GEYJ750V	MGF CHIP 1/16W 75	
R8426	ERJ3GEYJ360V	MGF CHIP 1/16W 36	
R8427	ERJ3GEYJ360V	MGF CHIP 1/16W 36	
R8501	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8502	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8503	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8504	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8518	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R8520	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R8533	ERJ3GEYF153V	MGF CHIP 1/16W 15K	
R8534	ERJ3GEYJ622V	MGF CHIP 1/16W 6.2K	
R8535	ERJ3GEYF153V	MGF CHIP 1/16W 15K	
R8536	ERJ3GEYJ622V	MGF CHIP 1/16W 6.2K	
R8557	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8558	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8565	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R8566	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8567	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R8568	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8569	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8604	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8605	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8606	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8608	ERJ3GEYF392V	MGF CHIP 1/16W 3.9K	
R8626	ERJ3GEYF153V	MGF CHIP 1/16W 15K	
R8627	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8628	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8629	ERJ3GEYJ683V	MGF CHIP 1/16W 68K	
R8631	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8632	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8633	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8634	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8637	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8638	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8639	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8640	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8643	ERJ3GEYJ271V	MGF CHIP 1/16W 270	
R8644	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R8645	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8646	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8647	ERJ3GEYJ682V	MGF CHIP 1/16W 6.8K	
R8648	ERJ3GEYJ203V	MGF CHIP 1/16W 20K	
R8649	ERJ3GEYJ203V	MGF CHIP 1/16W 20K	
R8650	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8801	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8807	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R8808	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8809	ERJ8GEYJ1R0Z	MGF CHIP 1/8W 1	
R8810	ERJ8GEYJ1R0Z	MGF CHIP 1/8W 1	
R8811	ERJ8GEYJ1R0Z	MGF CHIP 1/8W 1	
R8812	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R8813	ERJ6GEYJ1R0V	MGF CHIP 1/10W 1	
R8814	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	

Ref. No.	Part No.	Part Name & Description	Remarks
R8815	ERJ6GEYJ1R0V	MGF CHIP 1/10W 1	
R8816	ERJ6GEYJ1R0V	MGF CHIP 1/10W 1	
R8817	ERJ6GEYJ1R0V	MGF CHIP 1/10W 1	
R8818	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8901	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8905	ERJ3GEYJ823V	MGF CHIP 1/16W 82K	
R8907	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8909	ERJ8GEYJ100V	MGF CHIP 1/8W 10	
R8910	ERJ8GEYJ100V	MGF CHIP 1/8W 10	
R8911	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R8912	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8913	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8914	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8915	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8916	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8921	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8922	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8923	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8924	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8925	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8926	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8927	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8928	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8929	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8930	ERJ3GEY0R00V	MGF CHIP 1/16W 0	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C8001	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8002	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8005	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C8006	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C8007	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8008	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8009	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8010	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8011	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8012	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8013	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8014	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C8015	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8016	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8017	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8018	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8019	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8020	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8021	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8022	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8023	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8024	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8025	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8026	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8027	ECJ1VB0J105K	C CHIP 6.3V 1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C8028	ECJ1VC1H330J	C CHIP 50V 33PF	
C8029	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8030	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8031	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8032	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8033	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8034	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8035	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8036	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8037	ECJ1VC1H080C	C CHIP 50V 8PF	
C8038	ECJ1VC1H080C	C CHIP 50V 8PF	
C8039	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C8040	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8041	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8201	ECEA0JKA331	ELECTROLYTIC 6.3V 330UF	
C8202	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8203	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8204	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8205	ECEA0JKA331	ELECTROLYTIC 6.3V 330UF	
C8206	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8207	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8208	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8209	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8210	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8211	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8212	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8213	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8214	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8215	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8216	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8217	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8412	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C8413	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8414	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8415	ECJ1VC1H220J	C CHIP 50V 22PF	
C8416	ECJ1VC1H220J	C CHIP 50V 22PF	
C8417	ECJ1VC1H390J	C CHIP 50V 39PF	
C8418	ECJ1VC1H390J	C CHIP 50V 39PF	
C8419	ECJ1VC1H390J	C CHIP 50V 39PF	
C8420	ECJ1VC1H390J	C CHIP 50V 39PF	
C8421	ECJ1VC1H220J	C CHIP 50V 22PF	
C8422	ECJ1VC1H220J	C CHIP 50V 22PF	
C8423	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8424	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8425	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C8504	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8505	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8506	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8507	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8508	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8512	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8513	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8520	ECEA1AKA330I	ELECTROLYTIC 10V 33UF	
C8521	ECEA1CKA101	ELECTROLYTIC 16V 100UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C8522	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8523	ECEA1AKA330I	ELECTROLYTIC 10V 33UF	
C8536	ECJ1VC1H101J	C CHIP 50V 100PF	
C8537	ECJ1VC1H101J	C CHIP 50V 100PF	
C8544	ECJ1VB1H102K	C CHIP 50V 1000PF	
C8545	ECJ1VB1H102K	C CHIP 50V 1000PF	
C8553	ECJ1VB1H472K	C CHIP 50V 4700PF	
C8555	ECJ1VB1H472K	C CHIP 50V 4700PF	
C8568	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8569	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8571	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C8572	ECEA0JKA331	ELECTROLYTIC 6.3V 330UF	
C8573	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8574	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8603	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8604	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8605	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8606	ECJ1VB1E333K	C CHIP 25V 0.033UF	
C8607	ECJ1VC1H330J	C CHIP 50V 33PF	
C8608	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8610	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8611	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8612	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8613	ECJ1VC1H101J	C CHIP 50V 100PF	
C8614	ECJ1VB1E183K	C CHIP 25V 0.018UF	
C8615	ECJ1VB1H562K	C CHIP 50V 5600PF	
C8616	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8619	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8620	ECJ1VC1H221J	C CHIP 50V 220PF	
C8621	ECJ1VB0J103K	C CHIP 6.3V 0.01UF	
C8622	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8624	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8625	ECJ1VB1C153K	C CHIP 16V 0.015UF	
C8626	ECJ1VB1C104K	C CHIP 16V 0.1UF	
C8630	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C8632	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C8638	ECJ1VB1C104K	C CHIP 16V 0.1UF	
C8639	ECJ1VB1C104K	C CHIP 16V 0.1UF	
C8640	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8642	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8643	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8644	ECJ1VC1H560J	C CHIP 50V 56PF	
C8645	ECJ1VC1H560J	C CHIP 50V 56PF	
C8648	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8649	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8650	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8651	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8652	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8653	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8806	F1K1A106A005	C CHIP 10V 10UF	
C8808	F1K1A106A005	C CHIP 10V 10UF	
C8809	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8810	ECJ1VC1H391J	C CHIP 50V 390PF	
C8811	ECJ1VB1C104K	C CHIP 16V 0.1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C8812	ECJ1VB1C104K	C CHIP 16V 0.1UF	
C8813	ECJ1VC1H391J	C CHIP 50V 390PF	
C8814	ECJ1VB1A105K	C CHIP 16V 1UF	
C8815	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8816	ECJ1VB1H472K	C CHIP 50V 4700PF	
C8817	F1K1A106A005	C CHIP 10V 10UF	
C8818	F1K1A106A005	C CHIP 10V 10UF	
C8901	ECJ1VC1H680J	C CHIP 50V 68PF	
C8904	ECJ1VC1H471J	C CHIP 50V 470PF	
C8905	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8906	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8907	ECJ1VC1H221J	C CHIP 50V 220PF	
C8911	ECJ1VC1H561J	C CHIP 50V 560PF	

FILTERS

Ref. No.	Part No.	Part Name & Description	Remarks
FL8401	F1Z1E2220002	EMI FILTER CHIP	
FL8402	J0HAAG000015	EMI FILTER CHIP	
FL8403	J0HAAG000015	EMI FILTER CHIP	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L8002	J0JHC0000027	EMI FILTER CHIP	
L8003	J0JDC0000002	EMI FILTER CHIP	
L8004	J0JCC0000117	EMI FILTER CHIP	
L8005	J0JCC0000215	EMI FILTER CHIP	
L8006	J0JCC0000215	EMI FILTER CHIP	
L8007	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8401	J0JDC0000002	EMI FILTER CHIP	
L8402	G1C270MA0021	INDUCTOR CHIP	
L8403	G1C270MA0021	INDUCTOR CHIP	
L8404	G1C330MA0021	INDUCTOR CHIP	
L8405	G1C330MA0021	INDUCTOR CHIP	
L8406	G1C270MA0021	INDUCTOR CHIP	
L8407	G1C270MA0021	INDUCTOR CHIP	
L8408	J0JDC0000002	EMI FILTER CHIP	
L8411	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8412	J0JHC0000068	EMI FILTER CHIP	
L8413	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8418	J0JBC0000010	EMI FILTER CHIP	
L8419	J0JBC0000010	EMI FILTER CHIP	
L8420	J0JBC0000010	EMI FILTER CHIP	
L8421	J0JBC0000010	EMI FILTER CHIP	
L8422	J0JBC0000010	EMI FILTER CHIP	
L8423	J0JBC0000010	EMI FILTER CHIP	
L8424	J0JBC0000010	EMI FILTER CHIP	
L8426	J0JHC0000078	EMI FILTER CHIP	
L8427	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
L8429	J0JHC0000078	EMI FILTER CHIP	
L8431	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8434	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8501	J0JBC0000010	EMI FILTER CHIP	

Ref. No.	Part No.	Part Name & Description	Remarks
L8503	J0JBC0000010	EMI FILTER CHIP	
L8504	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8516	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8517	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8601	J0JDC0000002	EMI FILTER CHIP	
L8602	J0JDC0000002	EMI FILTER CHIP	
L8620	J0JDC0000002	EMI FILTER CHIP	

CRYSTAL OSCILLATOR

Ref. No.	Part No.	Part Name & Description	Remarks
X8001	H0J368500019	CRYSTAL OSCILLATOR	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P8401	K1MN16A00060	CONNECTOR 16P	
P8402	K1MR10B00029	CONNECTOR 10P	
P8801	K1MN13B00062	CONNECTOR 13P	
P8901	K1MN26B00076	CONNECTOR 26P	

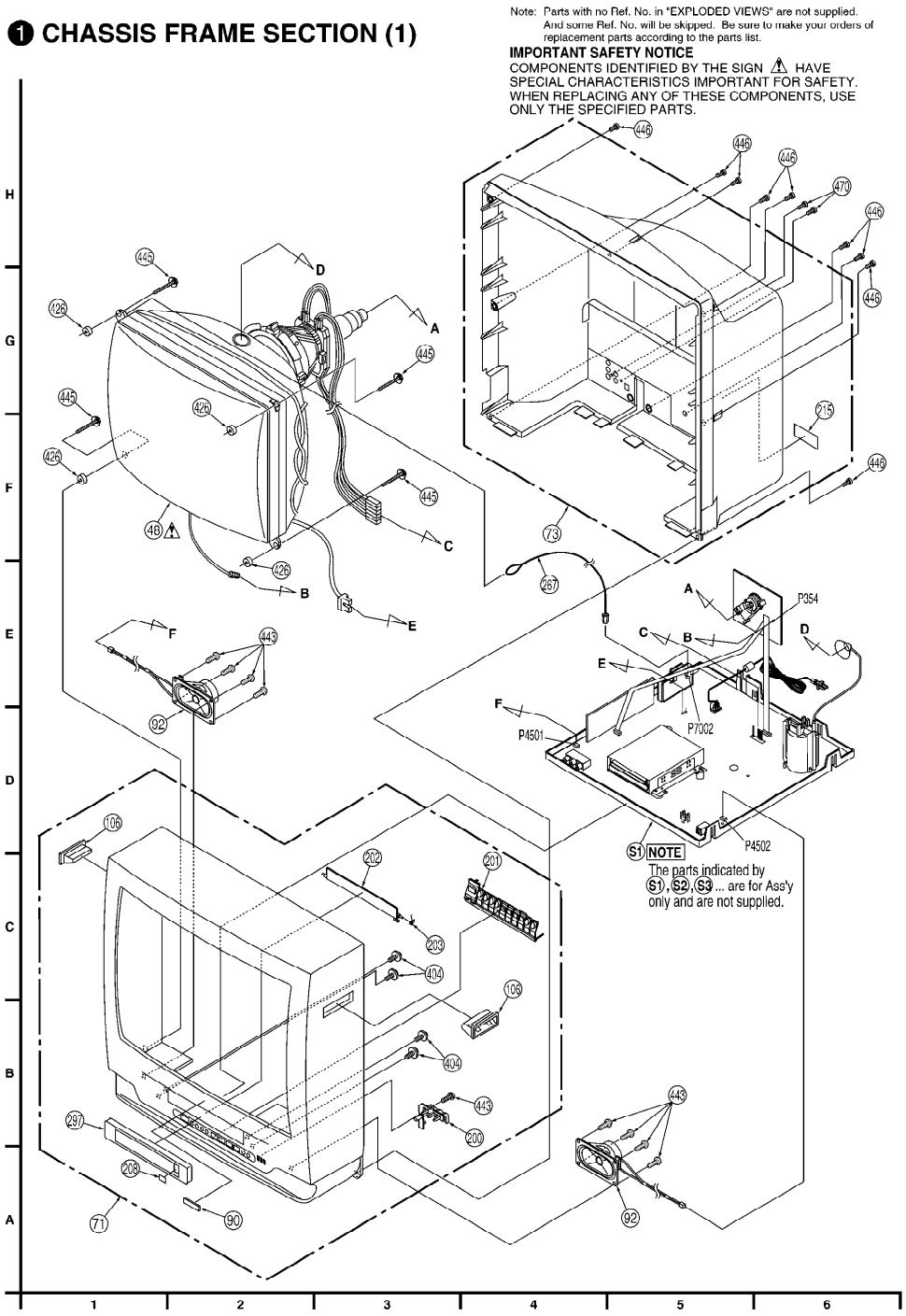
12.3.7. DVD SUB C.B.A.

SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW8952	K0L1BA000015	SWITCH PUSH	
SW8953	K0L1BA000014	SWITCH PUSH	

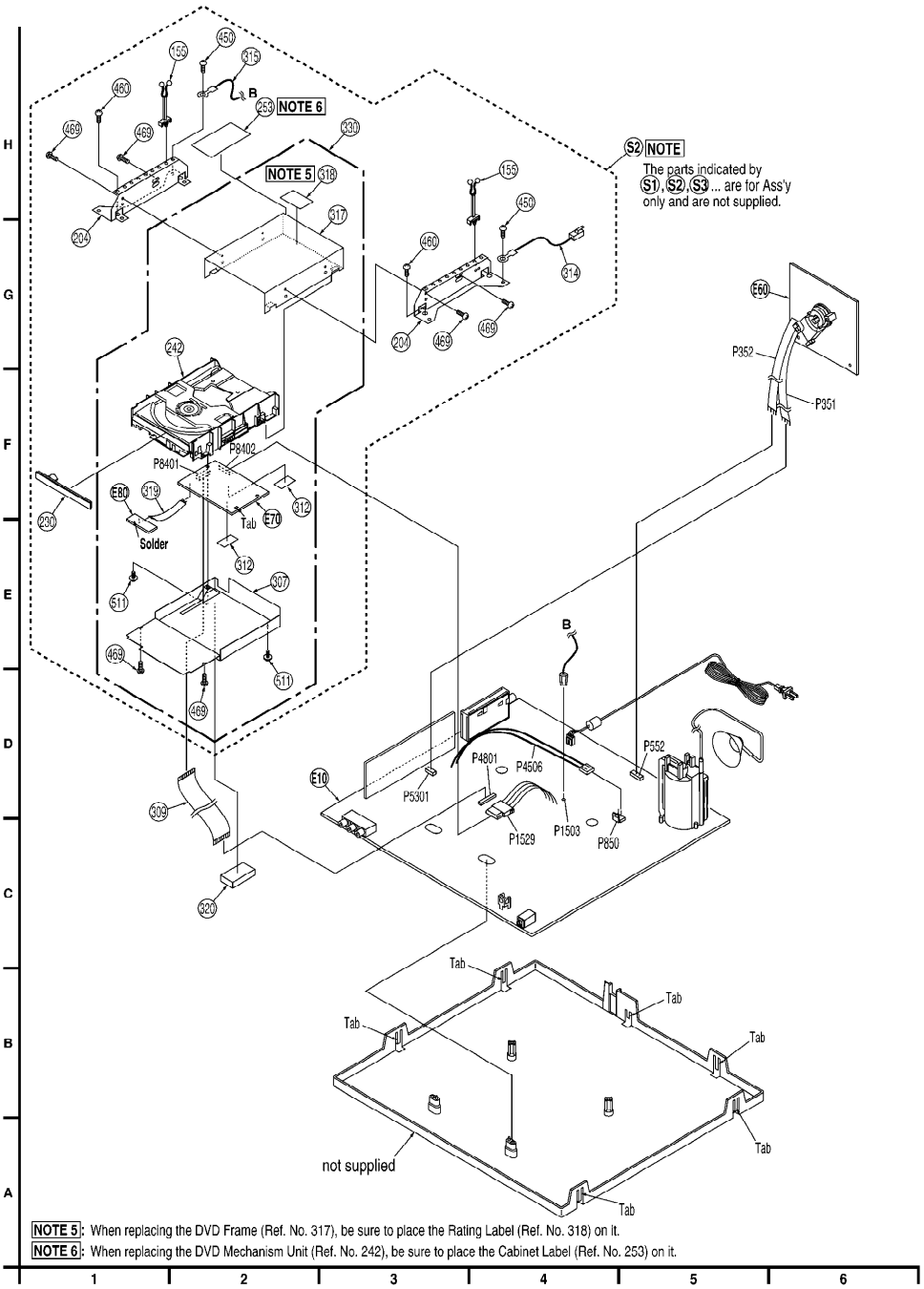
13. EXPLODED VIEWS (Model: PV-27D53)

13.1. CHASSIS FRAME SECTION (1)


❶ CHASSIS FRAME SECTION (1)
Note: Parts with no Ref. No. in "EXPLODED VIEWS" are not supplied. And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.
IMPORTANT SAFETY NOTICE
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.
P354
P4501
P7002
P4502
S1 NOTE
The parts indicated by S1, S2, S3 ... are for Ass'y only and are not supplied.

13.2. CHASSIS FRAME SECTION (2)

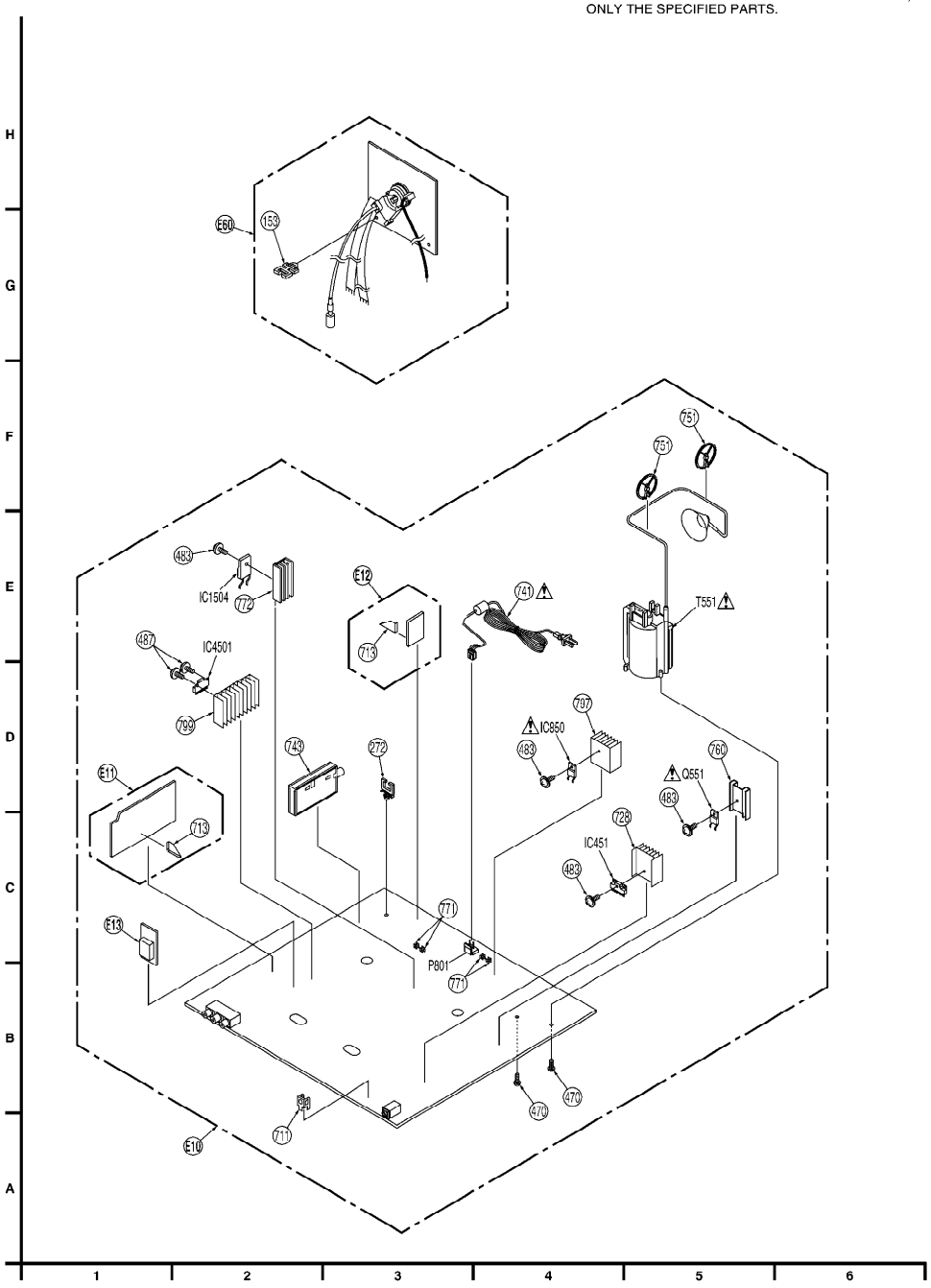
❷ CHASSIS FRAME SECTION (2)



13.3. CHASSIS FRAME SECTION (3)

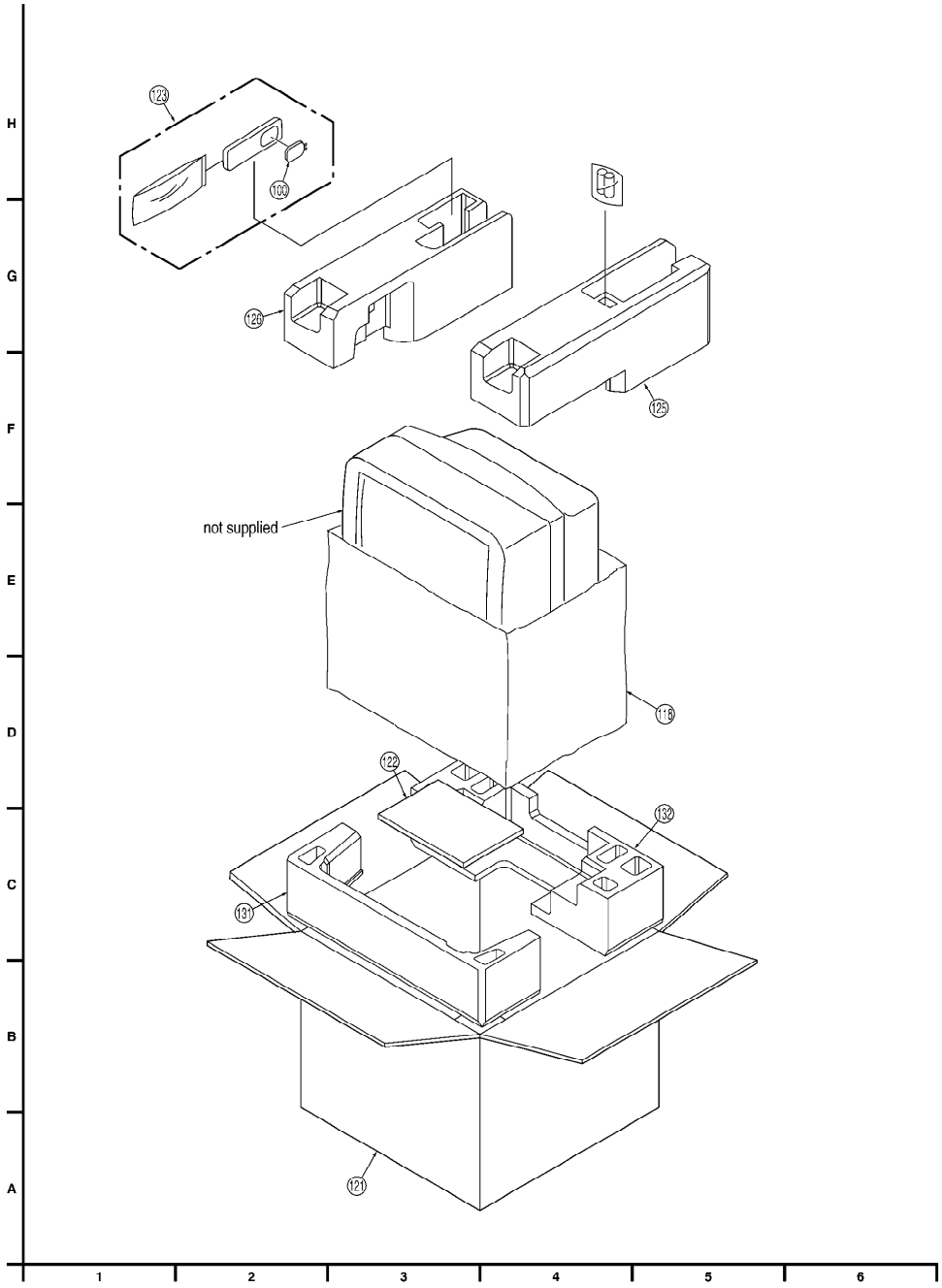
❸ CHASSIS FRAME SECTION (3)

IMPORTANT SAFETY NOTICE
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.



13.4. PACKING PARTS AND ACCESSORIES SECTION

❹ PACKING PARTS AND ACCESSORIES SECTION



14. REPLACEMENT PARTS LISTS (Model: PV-27D53)

BEFORE REPLACING PARTS, READ THE FOLLOWING:

14.1. REPLACEMENT NOTES

14.1.1. General Notes

1. Use only original replacement parts:

To maintain original function and reliability of repaired units, use

only original replacement parts which are listed with their part numbers in the parts list.

2. IMPORTANT SAFETY NOTICE
   Components identified by the sign ⚠ have special characteristics important for safety. When replacing any of these components, use only the specified parts.
3. SPECIAL NOTE
   All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "ELECTROSTATICALLY SENSITIVE (ES) DEVICES" section of this service manual.
4. Parts with no Ref. No. in "EXPLODED VIEWS" are not supplied. And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.
5. Parts different in shape or size may be used. However, only interchangeable parts will be supplied as service replacement parts.
6. Definition of Parts supplier:
   A. Parts with mark "MKI" in the Remarks column are supplied from MKI.
   B. Parts with mark "SPC" in the Remarks column are supplied from Spare Parts Center of Panasonic AVC Company.
   C. Parts without mark in the Remarks column are supplied from MKA.
7. Item numbers with capital letter E (Example: E10, E20, ...) in the Ref. No. column are shown in the exploded views.
8. Parts whose Ref. Nos. are the same are interchangeable as replacement parts. Any of these parts may be ordered and used as a replacement part.

14.1.2. Mechanical Replacement Notes

1. Section No. of parts shown in Exploded Views are indicated in the Remarks column.
2. The Infrared Remote Control Unit (Ref. No. 123) replacement part is available as a complete assembly unit only. Do not try to

disassemble the Infrared Remote Control Unit. However, the battery cover is available separately as a replacement part.

3. **When replacing the DVD Frame (Ref. No. 317), be sure to place the Rating Label (Ref. No. 318) on it.**
4. **When replacing the DVD Mechanism Unit (Ref. No. 242), be sure to place the Cabinet Label (Ref. No. 253) on it.**

14.1.3. Electrical Replacement Notes

1. **Unless otherwise specified;**
   All resistors are in Ω, K = 1,000 Ω, M = 1,000 kΩ.
2. **Abbreviation**

RTL:
Retention Time Limited
This indicates that the retention time is limited for this item. After the discontinuation of this item in production, it will no longer be available.

NR:
Non Repairable Board Ass'y

MGF CHIP:
Metal Glaze Film Chip

C CHIP:
Ceramic Chip

COMPLX CMP:
Complex Component

W FLMPRF:
Wirewound Flameproof

C.B.A.:
Circuit Board Assembly

P.C.B.:
Printed Circuit Board

E.S.D.:
Electrostatically Sensitive Devices

3. **SERVICE OF CHIP PARTS**

When servicing chip parts, please use a soldering iron of less than 30 W.

4. When replacing 0 Ω resistor, a wire can be substituted for it.
5. Since the UHF/VHF TUNER/TV DEMODULATOR UNIT (Ref. No. 743) has already been pre-adjusted at the factory, do not try to adjust the UHF/VHF TUNER/TV DEMODULATOR UNIT. The UHF/ VHF TUNER/TV DEMODULATORUNIT replacement part is available as a complete assembly unit only.
6. EEP ROM IC (IC6004) replacement note:
   There are 2 types of EEPROM IC (IC6004) used on the Main C.B.A. (DIP TYPE and SOP TYPE). However, these are same reliability, please refer to "MAIN C.B.A." in CIRCUIT BOARD LAYOUT.
7. MAIN C.B.A. replacement note:
   When the MAIN C.B.A. is replaced, the Jumper wire(J801 or J810) of the new MAIN C.B.A. must be cut before use. If the Jumper wire isn't cut, the power does not turned on to the TV circuit. / As for the location of the Jumper wire, pleaserefer to "MAIN C.B.A." in CIRCUIT BOARD LAYOUT.

14.2. MECHANICAL REPLACEMENT PARTS LIST

Definition of Parts supplier:

1. Parts with mark "MKI" in the Remarks column are supplied from MKI.
2. Parts with mark "SPC" in the Remarks column are supplied from Spare Parts Center of Panasonic AVC Company.
3. Parts without mark in the Remarks column are supplied from MKA.

MECHANICAL REPLACEMENT PARTS

Ref. No.	Part No.	Part Name & Description	Remarks
48	LXQVB1272R2	COLOR PICTURE TUBE UNIT	1 ⚠
71	LXQKY1273R2	FRONT CABINET ASS'Y	1
73	LXQKV1273R2	REAR COVER UNIT	1
90	TBMA008	BADGE,ABS RESIN	1
92	LXQAS9270F	SPEAKER UNIT	1
100	LSKF0518	BATTERY COVER	4
106	LSKH0053	HANDLE	1
118	LPE64005A	BAG,POLYETHYLENE	4
121	LSPG1453	PACKING CASE,PAPER	4
122	LSQT0669B	INSTRUCTION BOOK	4
123	LSSQ0373	INFRARED REMOTE CONTROL UNIT	4
125	LSPN0159	TOP CUSHION RIGHT,STYROFOAM	4
126	LSPN0158	TOP CUSHION LEFT,STYROFORM	4
131	LSPN0160	BOTTOM CUSHION FRONT,STYROFOAM	4
132	LSPN0161	BOTTOM CUSHION REAR,STYROFOAM	4
153	TMM7443-1	CLAMPER	3
155	TMM76403-1	CLAMPER	2
200	LKK683009A	PANEL LIGHT	1
201	LSGU0567	OPERATION BUTTON	1
202	LXQKF1273R2	DVD DISK DOOR-LID UNIT	1
203	LSMB0170	DVD CASSETTE DOOR SPRING	1
204	LSMA0612	DVD MOUNT PLATE,STEEL	2
208	TMK77708	CUSHION,RUBBER	1
215	LSQL1421	DOLBY & DTS CAUTION LABEL	1
230	LSKF0325	TRAY COVER	2
242	LSXK0118	DVD MECHANISM UNIT	2 MKI
253	LQF62005A	CABINET LABEL	2
267	VEKS5874	FM RADIO ANTENNA CORD,0V	1
272	TMM77412	CLAMPER	3
297	LSKW0138	DVD DISK DOOR UNIT	1
307	LSMA0648	SHIELD CASE	2
309	LSJW0044	FLAT FLEXIBLE CABLE W/OUT PLUG,12V DC	2
312	LMMY0030	HEAT SHEET,SI	2
314	VEKS5872	GROUNDING CABLE W/PLUG,0V	2
315	VEKS9428	GROUNDING CABLE W/PLUG,0V	2
317	LMMK0201	DVD FRAME	2
318	LSQL1414	RATING LABEL	2
319	LSJW0029	FLAT FLEXIBLE CABLE W/OUT PLUG,6V DC	2
320	J0KD00000022	FERRITE CORE	2
330	LSXK0105	DVD BLOCK	2 MKI
404	VHDS0472	SCREW,STEEL	1
426	TMM77532	CUSHION,RUBBER	1
443	XTV4+12A	TAPPING SCREW,STEEL	1
445	LHT60001Y	SCREW W/WASHER,STEEL	1
446	XTV4+16A	TAPPING SCREW,STEEL	1
450	VHDS0309	SCREW,STEEL	2
460	XTN4+12A	TAPPING SCREW,STEEL	2
469	XSN3+6	SCREW,STEEL	2
470	XTV3+10G	TAPPING SCREW,STEEL	1,3
483	XYN3+F10S	SCREW W/WASHER,STEEL	3
487	XYN3+J8	SCREW W/WASHER,STEEL	3
511	XYC26+CF8	SCREW W/WASHER,STEEL	2
711	PNA4611M00HC	INFRARED RECEIVER UNIT	3
713	VMAS1912	P.C.B. SUPPORT ANGLE	3

Ref. No.	Part No.	Part Name & Description	Remarks
728	LSSC0254	HEAT SINK	3
741	LSJA03492017	AC CORD W/PLUG,120V	3 ⚠
743	ENG36715G	TUNER,UHF/VHF NR	3
751	LML69001A	ANODE LEAD CLAMPER	3
760	TUC77628	HEAT SINK	3
771	EYF52BC	FUSE HOLDER	3
772	LSSC0408	HEAT SINK	3
797	LSSC0562	HEAT SINK	3
799	LSSC0584	AMP HEAT SINK	3
E10	LSEP2084A	MAIN C.B.A.	2,3 RTL
E11	LSEP2120A	AUDIO C.B.A.	3 RTL
E12	LSEP2086A	OPTICAL AUDIO JACK C.B.A.	3 RTL
E13	LSEP2119A	Y/C SEPARATION C.B.A.	3 RTL
E60	LRP63022S	CRT C.B.A.	2,3 RTL
E70	LSEP2091A1	DVD MAIN C.B.A.	2 RTL
E80	LSEP2014A	DVD SUB C.B.A.	2 RTL

SERVICE FIXTURES AND TOOLS

Ref. No.	Part No.	Part Name & Description	Remarks
	DVDT-S01	DVD TEST DISC	SPC

14.3. ELECTRICAL REPLACEMENT PARTS LIST

Definition of Parts supplier:

1. All parts are supplied from MKA.

PRINTED CIRCUIT BOARD ASSEMBLY

Ref. No.	Part No.	Part Name & Description	Remarks
E10	LSEP2084A	MAIN C.B.A.	E.S.D. RTL
E11	LSEP2120A	AUDIO C.B.A.	E.S.D. RTL
E12	LSEP2086A	OPTICAL AUDIO JACK C.B.A.	RTL
E13	LSEP2119A	Y/C SEPARATION C.B.A.	RTL
E60	LRP63022S	CRT C.B.A.	RTL
E70	LSEP2091A1	DVD MAIN C.B.A.	E.S.D. RTL
E80	LSEP2014A	DVD SUB C.B.A.	RTL

14.3.1. MAIN C.B.A.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC451	C1AA00000024	IC, LINEAR	
IC850	C5HABZZ00110	IC, LINEAR	⚠
IC1501	C5HABZZ00101	IC, LINEAR	⚠
IC1502	CNC1S101R1KT	IC, LINEAR	⚠
IC1502	CNC1S101S1KT	IC, LINEAR	⚠
IC1503	C0DAEMZ00005	IC, LINEAR	
IC1503	B1AZKD000001	IC, LINEAR	
IC1503	C0DAEMZ00001	IC, LINEAR	
IC1504	C0DAEGG00008	IC, LINEAR	
IC4501	AN7522N	IC, LINEAR	
IC4701	C0ABBB000017	IC, LINEAR	
IC4701	C1BB00000177	IC, LINEAR	
IC5301	AN15167A-VT	IC, LINEAR	
IC5361	C1AB00001682	IC, LINEAR	
IC5361	C1AB00001519	IC, LINEAR	
IC5601	C1AB00001340	IC, LINEAR	
IC6001	MN101D06FCK	IC, 8BIT MICROCONTROLLER	E.S.D.
IC6004	LSSK0018	IC, 1K EEP ROM	E.S.D.
IC6005	C0EBJ0000080	IC, CMOS STANDARD LOGIC	E.S.D.
IC6005	C0EBJ0000099	IC, CMOS STADNARD LOGIC	E.S.D.
IC6005	RN5VS47CA-TR	IC, CMOS STANDARD LOGIC	E.S.D.

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q431	2SB0709A0L	TRANSISTOR SI PNP	
Q431	B1ADCF000001	TRANSISTOR SI PNP	
Q501	2SC3941H	TRANSISTOR SI NPN	
Q523	B1ACBM000001	TRANSISTOR SI PNP	
Q523	2SA17670QA	TRANSISTOR SI PNP	
Q523	2SB12210QA	TRANSISTOR SI PNP	
Q551	B1BAFT000004	TRANSISTOR SI NPN	⚠
Q571	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q571	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q591	2SC3311AHA	TRANSISTOR SI NPN	
Q801	2SC3311ARA	TRANSISTOR SI NPN	
Q801	2SC3311ARA	TRANSISTOR SI NPN	
Q801	2SC3311ASA	TRANSISTOR SI NPN	
Q1501	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q1501	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q1502	2SB0709A0L	TRANSISTOR SI PNP CHIP	
Q1502	B1ADCF000001	TRANSISTOR SI PNP CHIP	
Q1503	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q1503	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q1504	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q1504	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q1505	B1BACC000010	TRANSISTOR SI NPN	
Q1505	2SD1581-T	TRANSISTOR SI NPN	
Q1506	2SD2396K	TRANSISTOR SI NPN	
Q1506	2SD23750P	TRANSISTOR SI NPN	
Q1507	2SD235800A	TRANSISTOR SI NPN	
Q1507	B1AAQB000002	TRANSISTOR SI NPN	

Ref. No.	Part No.	Part Name & Description	Remarks
Q1507	B1BADC000001	TRANSISTOR SI NPN	
Q1508	2SD0601AHL	TRANSISTOR SI NPN CHIP	
Q1508	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q1509	2SD06020RL	TRANSISTOR SI NPN CHIP	
Q1509	2SD0602ARL	TRANSISTOR SI NPN CHIP	
Q1509	2SD2432-R	TRANSISTOR SI NPN CHIP	
Q1510	B1BACC000010	TRANSISTOR SI NPN	
Q1510	2SD1581-T	TRANSISTOR SI NPN	
Q1511	2SD0601AHL	TRANSISTOR SI NPN CHIP	
Q1511	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q4701	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q4701	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5301	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q5301	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q5302	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5302	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5303	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5303	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5353	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5353	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5354	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5354	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5355	UNR221100L	TRANSISTOR SI NPN CHIP	
Q5355	DTC114EK-TX	TRANSISTOR SI NPN CHIP	
Q5381	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5381	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5901	2SD225900A	TRANSISTOR SI NPN	
Q6003	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q6003	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q6004	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q6004	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q6005	2SB0709A0L	TRANSISTOR SI PNP CHIP	
Q6005	B1ADCF000001	TRANSISTOR SI PNP CHIP	
Q6006	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q7002	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q7002	B1ABCF000020	TRANSISTOR SI NPN CHIP	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D401	B0AAML000001	DIODE SI	
D401	1SR139-400	DIODE SI	
D402	MA2C165001VT	DIODE SI	
D402	B0AACK000004	DIODE SI	
D402	1SS119	DIODE SI	
D503	B0HAGP000014	DIODE SI	
D504	MAZ40470MF	DIODE ZENER 4.7V	
D505	MA2C165001VT	DIODE SI	
D505	B0AACK000004	DIODE SI	
D505	1SS119	DIODE SI	
D553	B0HAGP000014	DIODE SI	
D554	B0AAEL000001	DIODE SI	
D554	MA2C16700E	DIODE SI	
D555	MAZ40680MF	DIODE ZENER 6.8V	
D555	B0BA6R600008	DIODE ZENER 6.8V	
D555	RD6.8ESAB3	DIODE ZENER 6.8V	
D555	04AZ6.8ZTPA7	DIODE ZENER 6.8V	
D558	B0HAGP000014	DIODE SI	
D591	D4DDD3R00002	THEARMISTOR	⚠
D592	MA2C16700E	DIODE SI	
D592	B0AAEL000001	DIODE SI	
D801	ERZV10V361CS	SURGE ABSORBER	⚠
D801	D4EAA3610001	SURGE ABSORBER	⚠
D802	ERZV10V361CS	SURGE ABSORBER	⚠
D802	D4EAA3610001	SURGE ABSORBER	⚠
D803	MA2C16700E	DIODE SI	
D803	B0AAEL000001	DIODE SI	
D804	B0AAKT000010	DIODE SI	⚠
D804	B0EAKT000027	DIODE SI	⚠
D804	B0EAKT000030	DIODE SI	⚠
D805	B0AAKT000010	DIODE SI	⚠
D805	B0EAKT000027	DIODE SI	⚠
D805	B0EAKT000030	DIODE SI	⚠
D806	B0AAKT000010	DIODE SI	⚠
D806	B0EAKT000027	DIODE SI	⚠
D806	B0EAKT000030	DIODE SI	⚠
D807	B0AAKT000010	DIODE SI	⚠
D807	B0EAKT000027	DIODE SI	⚠
D807	B0EAKT000030	DIODE SI	⚠
D854	B0JAMD000012	DIODE SI	
D854	B0JAGE000001	DIODE SI	
D854	B0JAME000082	DIODE SI	
D856	B0HAJL000001	DIODE SI	
D856	B0HAGP000012	DIODE SI	
D857	B0HAJL000001	DIODE SI	
D857	B0HAGP000012	DIODE SI	
D858	B0HAJL000001	DIODE SI	
D858	B0HAGP000012	DIODE SI	

Ref. No.	Part No.	Part Name & Description	Remarks
D859	B0JAPG000024	DIODE SI	
D859	B0JAPG000020	DIODE SI	
D859	B0JAPG000021	DIODE SI	
D860	B0EALR000005	DIODE SI	
D860	B0HAMR000063	DIODE SI	
D861	MA2180LA	DIODE ZENER 18V	⚠
D861	B0BA01800025	DIODE ZENER 18V	⚠
D861	1N4746A-T	DIODE ZENER 18V	⚠
D861	1N4746ARL	DIODE ZENER 18V	⚠
D863	B0HAHP000014	DIODE SI	
D863	B0HAJP000007	DIODE SI	
D863	B0HAMP000061	DIODE SI	
D863	B0HAMP000069	DIODE SI	
D1501	B0AAKT000010	DIODE SI	⚠
D1501	B0EAKT000027	DIODE SI	⚠
D1501	B0EAKT000030	DIODE SI	⚠
D1502	B0AAKT000010	DIODE SI	⚠
D1502	B0EAKT000027	DIODE SI	⚠
D1502	B0EAKT000030	DIODE SI	⚠
D1503	B0AAKT000010	DIODE SI	⚠
D1503	B0EAKT000027	DIODE SI	⚠
D1503	B0EAKT000030	DIODE SI	⚠
D1504	B0AAKT000010	DIODE SI	⚠
D1504	B0EAKT000027	DIODE SI	⚠
D1504	B0EAKT000030	DIODE SI	⚠
D1505	B0JAMD000012	DIODE SI	
D1505	B0JAGE000001	DIODE SI	
D1505	B0JAME000082	DIODE SI	
D1506	B0HAJL000001	DIODE SI	
D1506	B0HAGP000012	DIODE SI	
D1507	B0HAJL000001	DIODE SI	
D1507	B0HAGP000012	DIODE SI	
D1508	B0HAJL000001	DIODE SI	
D1508	B0HAGP000012	DIODE SI	
D1509	B0HAJL000001	DIODE SI	
D1509	B0HAGP000012	DIODE SI	
D1510	B0HAHP000014	DIODE SI	
D1510	B0HAJP000007	DIODE SI	
D1510	B0HAMP000061	DIODE SI	
D1510	B0HAMP000069	DIODE SI	
D1511	B0JANG000006	DIODE SI	
D1512	B0JANG000006	DIODE SI	
D1513	B0JBRD000006	DIODE SI	
D1514	B0JAME000079	DIODE SI	
D1514	B0JAME000049	DIODE SI	
D1514	B0JANE000011	DIODE SI	
D1514	B0JANE000022	DIODE SI	
D1515	B0HAHP000014	DIODE SI	
D1515	B0HAJP000007	DIODE SI	

[illegible]	[illegible]	[illegible]	

Ref. No.	Part No.	Part Name & Description	Remarks
D1515	B0HAMP000061	DIODE SI	
D1515	B0HAMP000069	DIODE SI	
D1516	MAZ4100NHF	DIODE ZENER 10V	
D1516	RD10JSAB3	DIODE ZENER 10V	
D1518	MA4051N-HTA	DIODE ZENER 5.1V	
D1519	MAZ20820A	DIODE ZENER 8.2V	
D1519	MAZ20820	DIODE ZENER 8.2V	
D1519	MAZ20820B	DIODE ZENER 8.2V	
D1520	B0AAML000001	DIODE SI	
D1520	B0EAKL000008	DIODE SI	
D1522	B0AAML000001	DIODE SI	
D1522	B0EAKL000008	DIODE SI	
D1524	MA2180LA	DIODE ZENER 18V	⚠
D1524	B0BA01800025	DIODE ZENER 18V	⚠
D1524	1N4746A-T	DIODE ZENER 18V	⚠
D1524	1N4746ARL	DIODE ZENER 18V	⚠
D1525	MAZ4047NMF	DIODE ZENER 4.7V	
D1526	MA2C165001VT	DIODE SI	
D1526	B0AACK000004	DIODE SI	
D1526	1SS119	DIODE SI	
D1527	MA2C165001VT	DIODE SI	
D1527	B0AACK000004	DIODE SI	
D1527	1SS119	DIODE SI	
D1528	MAZ20620A	DIODE ZENER 6.2V	
D1528	MAZ20620	DIODE ZENER 6.2V	
D1528	MAZ20620B	DIODE ZENER 6.2V	
D4590	MAZ41300HF	DIODE ZENER 13V	
D4591	MAZ41300HF	DIODE ZENER 13V	
D4592	MAZ41300HF	DIODE ZENER 13V	
D4593	MAZ41300HF	DIODE ZENER 13V	
D4594	MA2C165001VT	DIODE SI	
D4594	B0AACK000004	DIODE SI	
D4594	1SS119	DIODE SI	
D4595	MA2C165001VT	DIODE SI	
D4595	B0AACK000004	DIODE SI	
D4595	1SS119	DIODE SI	
D4701	MA2C165001VT	DIODE SI	
D4701	B0AACK000004	DIODE SI	
D4701	1SS119	DIODE SI	
D4702	MA2C165001VT	DIODE SI	
D4702	B0AACK000004	DIODE SI	
D4702	1SS119	DIODE SI	
D4851	MA2C165001VT	DIODE SI	
D4851	B0AACK000004	DIODE SI	
D4851	1SS119	DIODE SI	
D4852	MA2C165001VT	DIODE SI	
D4852	B0AACK000004	DIODE SI	
D4852	1SS119	DIODE SI	
D4859	MA2C165001VT	DIODE SI	
D4859	B0AACK000004	DIODE SI	
D4859	1SS119	DIODE SI	
D4860	MA2C165001VT	DIODE SI	
D4860	B0AACK000004	DIODE SI	

Ref. No.	Part No.	Part Name & Description	Remarks
D4860	1SS119	DIODE SI	
D5304	MA2C165001VT	DIODE SI	
D5304	B0AACK000004	DIODE SI	
D5304	1SS119	DIODE SI	
D5307	MA2C165001VT	DIODE SI	
D5307	B0AACK000004	DIODE SI	
D5307	1SS119	DIODE SI	
D5308	MA2C165001VT	DIODE SI	
D5308	B0AACK000004	DIODE SI	
D5308	1SS119	DIODE SI	
D5353	MA2C165001VT	DIODE SI	
D5353	B0AACK000004	DIODE SI	
D5353	1SS119	DIODE SI	
D5354	MA2C165001VT	DIODE SI	
D5354	B0AACK000004	DIODE SI	
D5354	1SS119	DIODE SI	
D5501	MAZ40620L1KT	DIODE ZENER 6.2V	⚠
D5508	MA2C165001VT	DIODE SI	
D5508	B0AACK000004	DIODE SI	
D5508	1SS119	DIODE SI	
D6003	MA2C165001VT	DIODE SI	
D6003	B0AACK000004	DIODE SI	
D6003	1SS119	DIODE SI	
D6005	MA2C165001VT	DIODE SI	
D6005	B0AACK000004	DIODE SI	
D6005	1SS119	DIODE SI	
D6301	B3ABA0000400	LIGHT EMITTING DIODE GREEN	
D6302	B3ACA0000192	LIGHT EMITTING DIODE ORANGE	
D6303	B3AAA0000538	LIGHT EMITTING DIODE RED	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R401	ERDS2TJ471	CARBON 1/4W 470	
R402	ERDS2TJ103	CARBON 1/4W 10K	
R405	ERG1SJ561P	METAL OXIDE 1W 560	
R406	ERDS2TJ334	CARBON 1/4W 330K	
R409	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R410	ERDS2TJ272	CARBON 1/4W 2.7K	
R411	ERDS2TJ104	CARBON 1/4W 100K	
R413	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R414	ERX1SJ1R2P	METAL FILM 1W 1.2	
R422	ERD25FJ101P	CARBON 1/4W 100	⚠
R427	ERDS1FJ1R5P	CARBON 1/2W 1.5	⚠
R431	ERDS2TJ821	CARBON 1/4W 820	
R432	ERJ6GEYJ563V	MGF CHIP 1/10W 56K	
R433	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R434	ERDS2TJ472	CARBON 1/4W 4.7K	
R435	ERDS2TJ102	CARBON 1/4W 1K	
R436	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R466	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R468	ERDS2TJ102	CARBON 1/4W 1K	
R471	ERDS1FJ152P	CARBON 1/2W 1.5K	⚠
R501	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R502	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R503	EROS2THF8251	PRECISION METAL FILM 1/4W 8.25K	⚠
R503	ER0S2TKF8251	PRECISION METAL FILM 1/4W 8.25K	⚠
R503	VRESR4TF8251	PRECISION METAL FILM 1/4W 8.25K	⚠
R504	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R508	ERDS1FJ1R0P	CARBON 1/2W 1	⚠
R509	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R511	ERG2SJ272H	METAL OXIDE 2W 2.7K	
R512	ERDS2TJ122	CARBON 1/4W 1.2K	
R513	ERDS2TJ472	CARBON 1/4W 4.7K	
R516	LAR05202J09	W FLMPRF 5W 2K	
R519	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R523	ERDS2TJ823	CARBON 1/4W 82K	
R524	ERDS2TJ103	CARBON 1/4W 10K	
R525	ERDS2TJ124	CARBON 1/4W 120K	
R526	ERX2SJR75H	METAL FILM 2W 0.75	⚠
R529	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R531	ERDS2TJ562	CARBON 1/4W 5.6K	
R552	ERDS2TJ472	CARBON 1/4W 4.7K	
R553	ERDS2TJ102	CARBON 1/4W 1K	
R555	ERDS2TJ683	CARBON 1/4W 68K	
R556	ERDS2TJ563T	CARBON 1/4W 56K	
R558	ERG2ANJ102H	METAL OXIDE 2W 1K	
R561	ERQ2CKPR82S	FUSE 2W 0.82	⚠
R562	ERF5ZK2R2	W FLMPRF 5W 2.2	
R571	ERDS2TJ101	CARBON 1/4W 100	
R572	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R573	ERDS2TJ101	CARBON 1/4W 100	
R574	ERJ6GEYJ103V	METAL CARBON 1/10W 10K	
R588	ERG12SJ560P	METAL OXIDE 1/2W 56	

Ref. No.	Part No.	Part Name & Description	Remarks
R591	ERDS2TJ103	CARBON 1/4W 10K	
R592	ERDS2TJ472	CARBON 1/4W 4.7K	
R801	VRESC2TK825T	SOLID 1/2W 8.2M	⚠
R802	ERDS2TJ472	CARBON 1/4W 4.7K	
R803	ERDS2TJ103	CARBON 1/4W 10K	
R804	ERF5ZKR82	W FLMPRF 5W 0.82	⚠
R804	LSREFDWKR82Z	W FLMPRF 5W 0.82	⚠
R850	D0AF154JA038	CARBON 1/2W 150K	
R851	ERD2FCG681V	FUSE 1/4W 680	⚠
R852	ERDS2TJ683	CARBON 1/4W 68K	
R853	ERDS2TJ683	CARBON 1/4W 68K	
R855	ERX2SZJR10P	METAL FILM 2W 0.1	
R857	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R866	ERG2SJ333H	METAL OXIDE 2W 33K	
R1501	D0AF473JA038	CARBON 1/2W 47K	
R1502	ERD2FCG681V	FUSE 1/4W 680	⚠
R1503	ERX2SJR22P	METAL FILM 2W 0.22	
R1505	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R1507	ERJ6GEYJ122V	MGF CHIP 1/10W 1.2K	
R1508	ERG2SJ333H	METAL OXIDE 2W 33K	
R1510	ERDS2TJ750	CARBON 1/4W 75	
R1511	ERD25FJ100P	CARBON 1/4W 10	⚠
R1511	ERD25FPJ100P	CARBON 1/4W 10	⚠
R1511	VRESF4FJ100P	CARBON 1/4W 10	⚠
R1512	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R1513	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R1514	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R1515	D1BD2431A016	MGF CHIP 1/10W 2.43K	
R1516	D0HD222ZA002	MGF CHIP 1/10W 2.2K	
R1517	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1518	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1519	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R1520	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R1521	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1522	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1523	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R1524	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R1525	ERDS2TJ331	CARBON 1/4W 330	
R1526	ERDS2TJ153	CARBON 1/4W 15K	
R1527	ERDS1TJ272	CARBON 1/2W 2.7K	
R1528	ERDS2TJ153	CARBON 1/4W 15K	
R1529	ERG12SJ272P	METAL OXIDE 1/2W 2.7K	
R1530	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R1531	ERJ6GEYJ122V	MGF CHIP 1/10W 1.2K	
R1532	ERJ6GEYJ681V	MGF CHIP 1/10W 680	
R1534	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R1535	ERDS2T0T	CARBON 1/4W 0	
R1536	ERDS2TJ153	CARBON 1/4W 15K	
R1537	ERDS2TJ153	CARBON 1/4W 15K	
R1538	ERJ6GEYJ681V	MGF CHIP 1/10W 680	
R1605	ERJ6GEYJ331V	MGF CHIP 1/10W 330	

Ref. No.	Part No.	Part Name & Description	Remarks
R4171	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R4172	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4505	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R4506	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R4524	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4525	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4526	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R4527	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4528	ERJ6GEYJ683V	MGF CHIP 1/10W 68K	
R4531	ERJ6GEYJ274V	MGF CHIP 1/10W 270K	
R4591	ERDS2TJ331	CARBON 1/4W 330	
R4592	ERDS2TJ331	CARBON 1/4W 330	
R4593	ERDS2TJ331	CARBON 1/4W 330	
R4594	ERDS2TJ331	CARBON 1/4W 330	
R4702	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4704	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4705	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4706	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4707	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4792	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4793	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4851	ERJ6GEYJ750V	MGF CHIP 1/10W 75	
R4861	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4862	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4863	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R4864	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R5301	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5302	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R5303	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R5304	ERJ6GEYJ393V	MGF CHIP 1/10W 39K	
R5305	ERJ6GEYJ224V	MGF CHIP 1/10W 220K	
R5306	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R5307	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R5308	ERJ6GEYJ393V	MGF CHIP 1/10W 39K	
R5309	ERJ6GEYJ184V	MGF CHIP 1/10W 180K	
R5310	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5311	ERJ6GEYJ331V	MGF CHIP 1/10W 330	
R5312	ERJ6GEYJ331V	MGF CHIP 1/10W 330	
R5313	ERJ6GEYJ331V	MGF CHIP 1/10W 330	
R5314	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R5315	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R5316	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R5317	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5318	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R5320	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5321	ERJ6GEYJ750V	MGF CHIP 1/10W 75	
R5324	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5326	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R5327	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5328	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5329	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5361	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R5362	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5363	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	

Ref. No.	Part No.	Part Name & Description	Remarks
R5364	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5365	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5366	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5367	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5381	ERJ6GEYJ563V	MGF CHIP 1/10W 56K	
R5382	ERJ6GEYJ682V	MGF CHIP 1/10W 6.8K	
R5383	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R5401	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R5402	ERJ6GEYJ394V	MGF CHIP 1/10W 390K	
R5403	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R5405	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R5406	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5501	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R5502	ERJ6GEYJ394V	MGF CHIP 1/10W 390K	
R5503	ERDS2TJ471	CARBON 1/4W 470	
R5504	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5505	ERJ6ENF3241V	MGF CHIP 1/10W 3.24K	⚠
R5506	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R5508	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R5510	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5511	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5512	ERJ6GEYJ151V	MGF CHIP 1/10W 150	
R5513	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5515	ERJ6GEYJ272V	MGF CHIP 1/10W 2.7K	
R5604	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R5605	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5614	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5615	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5902	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5932	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R5933	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6001	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6002	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6003	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6004	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6005	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6006	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R6007	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R6008	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6010	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6011	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R6012	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R6013	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6014	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6015	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6016	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6017	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6018	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6019	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R6020	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6021	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6024	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6027	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6028	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	

[illegible]	[illegible]	[illegible]	

Ref. No.	Part No.	Part Name & Description	Remarks
R6030	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6031	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6035	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6040	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6041	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6042	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6043	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6044	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6045	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6046	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6047	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6049	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R6050	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6053	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R6054	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6055	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R6056	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6057	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6058	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6059	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R6061	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6062	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6063	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6064	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6066	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6067	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6077	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6078	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6080	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6081	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6082	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6090	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R6091	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R6092	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R6093	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6094	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6095	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6098	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6100	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6126	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R6127	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R6130	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6131	ERJ6GEYJ183V	MGF CHIP 1/10W 18K	
R6132	ERJ6GEYJ391V	MGF CHIP 1/10W 390	
R6133	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6134	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6135	ERJ6GEYJ475V	MGF CHIP 1/10W 4.7M	
R6136	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R6137	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R6138	ERDS2TJ560T	CARBON 1/4W 56	
R6143	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6144	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R6145	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R6146	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	

Ref. No.	Part No.	Part Name & Description	Remarks
R6150	ERJ6GEYJ273V	MGF CHIP 1/10W 27K	
R6160	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6161	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6162	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6163	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6164	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R6165	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R6166	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R6171	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R6205	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R6207	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R6208	ERJ6GEYJ152V	MGF CHIP 1/10W 1.5K	
R6301	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R6302	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R6303	ERJ6GEYJ183V	MGF CHIP 1/10W 18K	
R6304	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R6305	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R6306	ERJ6GEYJ123V	MGF CHIP 1/10W 12K	
R6307	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R6308	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R7001	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7002	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7003	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7004	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7006	ERJ6GEYJ271V	MGF CHIP 1/10W 270	
R7007	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7008	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R7009	ERJ6GEYJ182V	MGF CHIP 1/10W 1.8K	
R7010	ERDS2TJ101	CARBON 1/4W 100	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C401	ECA1HM2R2B	ELECTROLYTIC 50V 2.2UF	
C402	ECA1CM471B	ELECTROLYTIC 16V 470UF	
C408	ECA1HGE010KB	ELECTROLYTIC 50V 1UF	
C409	ECA1VM221B	ELECTROLYTIC 35V 220UF	
C413	ECQB1H104KF	POLYESTER 50V 0.1UF	
C414	ECA1EM222B	ELECTROLYTIC 25V 2200UF	
C418	ECA1VM471B	ELECTROLYTIC 35V 470UF	
C458	ECJ2VB1E103K	C CHIP 25V 0.01UF	
C510	ECKR2H681KB5	CERAMIC 500V 680PF	
C513	ECA1HM100B	ELECTROLYTIC 50V 10UF	
C521	ECA1HM100B	ELECTROLYTIC 50V 10UF	
C523	ECA1CM101B	ELECTROLYTIC 16V 100UF	
C555	ECWH16123JVB	POLYESTER 1600V 0.012UF	⚠
C555	F0A3C123A002	POLYESTER 1250V 0.012UF	⚠
C555	LSCFN12123JB	POLYESTER 1250V 0.012UF	⚠
C556	ECWF2564JSB	POLYESTER 250V 0.56UF	
C558	ECA1VM102B	ELECTROLYTIC 35V 1000UF	
C560	ECA2EM100B	ELECTROLYTIC 250V 10UF	⚠
C561	ECA1HM4R7B	ELECTROLYTIC 50V 4.7UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C563	F2A2D3300010	ELECTROLYTIC 200V 33UF	
C576	ECKC3D152KBP	CERAMIC 2KV 1500PF	⚠
C576	ECKW3D152KBP	CERAMIC 2KV 1500PF	⚠
C576	ECWH16152JVB	CERAMIC 1.2KV 1500PF	⚠
C801	ECQU2A823MLA	POLYESTER 250V 0.082UF	⚠
C801	LSCFQ2A823MC	POLYESTER 250V 0.082UF	⚠
C802	J0LE00000023	ARRESTER	⚠
C803	ECKATS103MF	CERAMIC 250V 0.01UF	⚠
C803	ECKETS103MF	CERAMIC 125V 0.01UF	⚠
C803	VCKST3G103MY	CERAMIC 250V 0.01UF	⚠
C803	VCKSU3D103MY	CERAMIC 125V 0.01UF	⚠
C806	VCKSRNG472ZX	CERAMIC 250V 4700PF	
C807	VCKSRNG472ZX	CERAMIC 250V 4700PF	
C808	VCKSRNG472ZX	CERAMIC 250V 4700PF	
C809	VCKSRNG472ZX	CERAMIC 250V 4700PF	
C855	ECA1HHG470B	ELECTROLYTIC 50V 47UF	
C856	ECJ2VB1H471K	C CHIP 50V 470PF	
C857	VCESAS2D561E	ELECTROLYTIC 200V 560UF	⚠
C857	ECEC2DP561BB	ELECTROLYTIC 200V 560UF	⚠
C857	F2B2D5610011	ELECTROLYTIC 200V 560UF	⚠
C857	VCESAY2D561E	ELECTROLYTIC 200V 560UF	⚠
C858	ECKN3D222KBP	CERAMIC 2KV 4700PF	
C859	ECJ2VB1H122K	C CHIP 50V 1200PF	
C861	F1B2E152A012	CERAMIC 250V 1500PF	⚠
C861	F1B2E152A011	CERAMIC 250V 1500PF	⚠
C861	F1B2E152A044	CERAMIC 250V 1500PF	⚠
C861	F1B2E152A045	CERAMIC 250V 1500PF	⚠
C861	F1B2E1520002	CERAMIC 250V 1500PF	⚠
C861	F1B2E1520006	CERAMIC 250V 1500PF	⚠
C864	F1B3A102A009	CERAMIC 25V 1000PF	
C865	ECEA1PEE102	ELECTROLYTIC 18V 1000UF	
C867	VCESAS2D331E	ELECTROLYTIC 200V 330UF	⚠
C867	ECEC2DP331BB	ELECTROLYTIC 200V 330UF	⚠
C867	F2A2D3310002	ELECTROLYTIC 200V 330UF	⚠
C867	F2B2D3310013	ELECTROLYTIC 200V 330UF	⚠
C868	ECEA1PEE102	ELECTROLYTIC 18V 1000UF	
C869	ECKR2H221KB5	CERAMIC 500V 220PF	
C870	ECA2DHG4R7B	ELECTROLYTIC 200V 4.7UF	
C872	ECEA2DU820YE	ELECTROLYTIC 200V 82UF	⚠
C872	F2A2D8200001	ELECTROLYTIC 200V 82UF	⚠
C872	F2A2D8200003	ELECTROLYTIC 200V 82UF	⚠
C872	VCESR2D820XE	ELECTROLYTIC 200V 82UF	⚠
C1501	F1B2E101A009	CERAMIC 250V 100PF	⚠
C1501	F1B2E101A008	CERAMIC 250V 100PF	⚠

Ref. No.	Part No.	Part Name & Description	Remarks
C1501	F1B2E101A032	CERAMIC 250V 100PF	⚠
C1501	F1B2E101A037	CERAMIC 250V 100PF	⚠
C1502	ECKATS103MF	CERAMIC 250V 0.01UF	⚠
C1502	ECKETS103MF	CERAMIC 125V 0.01UF	⚠
C1502	VCKST3G103MY	CERAMIC 250V 0.01UF	⚠
C1502	VCKSU3D103MY	CERAMIC 125V 0.01UF	⚠
C1503	ECKATS103MF	CERAMIC 250V 0.01UF	⚠
C1503	VCKSEKD103PZ	CERAMIC 125V 0.01UF	⚠
C1503	VCKSEMD103PZ	CERAMIC 125V 0.01UF	⚠
C1503	VCKSGKD103QZ	CERAMIC 125V 0.01UF	⚠
C1503	VCKSGMD103QZ	CERAMIC 125V 0.01UF	⚠
C1503	VCKSTKG103ZY	CERAMIC 125V 0.01UF	⚠
C1503	VCKSTMG103ZY	CERAMIC 125V 0.01UF	⚠
C1503	VCKSUKD103MY	CERAMIC 125V 0.01UF	⚠
C1503	VCKSUMD103MY	CERAMIC 125V 0.01UF	⚠
C1504	F1B2E152A012	CERAMIC 250V 1500PF	⚠
C1504	F1B2E152A011	CERAMIC 250V 1500PF	⚠
C1504	F1B2E152A044	CERAMIC 250V 1500PF	⚠
C1504	F1B2E152A045	CERAMIC 250V 1500PF	⚠
C1504	F1B2E1520002	CERAMIC 250V 1500PF	⚠
C1504	F1B2E1520006	CERAMIC 250V 1500PF	⚠
C1505	ECA1HHG470B	ELECTROLYTIC 50V 47UF	
C1506	ECJ2VC1H471J	C CHIP 50V 470PF	
C1507	ECEA2DU121YE	ELECTROLYTIC 200V 120UF	⚠
C1507	F2A2D1210001	ELECTROLYTIC 200V 120UF	⚠
C1507	F2A2D1210003	ELECTROLYTIC 200V 120UF	⚠
C1507	VCESR2D121XE	ELECTROLYTIC 200V 120UF	⚠
C1508	F1B3D152A010	CERAMIC 2KV 1500PF	
C1509	ECKR2H221KB5	CERAMIC 500V 220PF	
C1510	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C1511	ECA2DHG4R7B	ELECTROLYTIC 200V 4.7UF	
C1512	ECJ2VB1H821K	C CHIP 50V 820PF	
C1515	ECUV1H101KBN	C CHIP 50V 100PF	
C1516	ECEA1PEE331	ELECTROLYTIC 18V 330UF	
C1517	ECEA1PEE331	ELECTROLYTIC 18V 330UF	
C1518	ECA1HHG470B	ELECTROLYTIC 50V 47UF	
C1519	EEUFC0J152S	ELECTROLYTIC 6.3V 1500UF	
C1520	ECEA1PEE331	ELECTROLYTIC 18V 330UF	
C1521	ECJ2VB1C224K	C CHIP 16V 0.22UF	
C1522	ECA1CM101B	ELECTROLYTIC 16V 100UF	
C1523	ECA0JM102B	ELECTROLYTIC 6.3V 1000UF	
C1525	ECA0JM102B	ELECTROLYTIC 6.3V 1000UF	
C1526	ECEA1CKA100B	ELECTROLYTIC 16V 10UF	
C1527	ECA0JM102B	ELECTROLYTIC 6.3V 1000UF	
C1528	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C1530	ECEA1CKA470	ELECTROLYTIC 16V 47UF	

C1330	ECEA1CKA470	ELECTROLYTIC 16V 47UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C1531	ECJ2YB1C334K	C CHIP 16V 0.33UF	
C1533	ECEA1HKAR47B	ELECTROLYTIC 50V 0.47UF	
C1535	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C1537	ECEA1HKAR47	ELECTROLYTIC 50V 0.47UF	
C1538	ECEA1CKA100B	ELECTROLYTIC 16V 10UF	
C1539	ECEA0JEE101B	ELECTROLYTIC 6.3V 100UF	
C1540	ECA0JM101B	ELECTROLYTIC 6.3V 100UF	
C1541	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C1542	ECA1CM471B	ELECTROLYTIC 16V 470UF	
C1545	ECA1CM331B	ELECTROLYTIC 16V 330UF	
C1546	ECJ2FB0J106M	C CHIP 6.3V 10UF	
C1547	ECJ2FB0J106M	C CHIP 6.3V 10UF	
C1548	ECJ2YB1H104K	C CHIP 50V 0.1UF	
C1549	ECEA1PEE331	ELECTROLYTIC 18V 330UF	
C1550	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C1552	ECEA1HKAR47	ELECTROLYTIC 50V 0.47UF	
C1553	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C1555	ECJ2FB1C105K	C CHIP 16V 1UF	
C1556	ECJ2FB0J106M	C CHIP 6.3V 10UF	
C1557	ECJ2FB0J106M	C CHIP 6.3V 10UF	
C1605	ECJ2VC1H270J	C CHIP 50V 27PF	
C1606	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C1607	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4171	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4518	ECA1CM471B	ELECTROLYTIC 16V 470UF	
C4520	ECA1CM471B	ELECTROLYTIC 16V 470UF	
C4527	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4528	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C4529	ECEA1CKA220	ELECTROLYTIC 16V 22UF	
C4530	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C4531	ECJ2VB1H332K	C CHIP 50V 3300PF	
C4532	ECJ2VB1H332K	C CHIP 50V 3300PF	
C4591	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C4592	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C4701	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4702	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4703	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4704	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4707	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4708	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4861	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4863	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5301	ECEA1CKN100	ELECTROLYTIC 16V 10UF	
C5302	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C5303	ECEA1HKAR47	ELECTROLYTIC 50V 0.47UF	
C5305	ECEA1HKAR47	ELECTROLYTIC 50V 0.47UF	
C5306	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5307	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5361	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5362	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5363	ECJ2VC1H220J	C CHIP 50V 22PF	
C5367	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5401	VCUSTBC224KB	C CHIP 16V 0.22UF	
C5402	ECJ2VB1H222K	C CHIP 50V 2200PF	

Ref. No.	Part No.	Part Name & Description	Remarks
C5403	ECEA1HKA2R2	ELECTROLYTIC 50V 2.2UF	
C5501	ECJ2VB1E183K	C CHIP 25V 0.018UF	
C5502	ECJ2VB1H681K	C CHIP 50V 680PF	
C5505	ECA1CM221	ELECTROLYTIC 16V 220UF	
C5506	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5507	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C5508	ECUV1H221JSN	C CHIP 50V 220PF	
C5510	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C5511	ECJ2VB1E333K	C CHIP 25V 0.033UF	
C5516	ECJ2VB1E333K	C CHIP 25V 0.033UF	
C5601	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5602	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C5603	ECJ2VC1H150J	C CHIP 50V 15PF	
C5604	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C5605	ECJ2VB1E153K	C CHIP 25V 0.015UF	
C5606	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5607	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5609	ECJ2VC1H220J	C CHIP 50V 22PF	
C5610	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C5902	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C5903	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C5904	ECJ2VB1C104K	C CHIP 16V 0.1UF	
C5905	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C5906	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5932	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C6001	ECEA0JKA331	ELECTROLYTIC 6.3V 330UF	
C6002	ECJ2VC1H080C	C CHIP 50V 8PF	
C6003	ECJ2VC1H100C	C CHIP 50V 10PF	
C6004	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C6006	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C6009	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C6013	ECJ2VC1H101J	C CHIP 50V 100PF	
C6017	ECJ2VC1H101J	C CHIP 50V 100PF	
C6018	ECJ2VC1H101J	C CHIP 50V 100PF	
C6020	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C6021	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C6029	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C6044	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C6050	ECJ2VC1H181J	C CHIP 50V 180PF	
C6212	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C6213	ECEA0JKA331I	ELECTROLYTIC 6.3V 330UF	
C6302	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C6401	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C6402	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C6403	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C6404	ECJ2VC1H121J	C CHIP 50V 120PF	
C6406	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C6408	ECJ2VB1H222K	C CHIP 50V 2200PF	
C6410	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C7002	ECJ2VB1H102K	C CHIP 50V 1000PF	
C7006	ECA0JM102B	ELECTROLYTIC 6.3V 1000UF	
C7007	ECJ2VB1H102K	C CHIP 50V 1000PF	
C7008	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C7010	ECEA1HKA010	ELECTROLYTIC 50V 1UF	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L551	LLH6602T	COIL	⚠
L801	ELF21V025A	LINE FILTER	⚠
L801	J0HBLH000001	LINE FILTER	⚠
L802	ELF21V025A	LINE FILTER	⚠
L802	J0HBLH000001	LINE FILTER	⚠
L850	J0JKA0000015	COIL	
L855	G0A100YA0001	COIL	
L856	VLQSAB7D220K	COIL 22UH	
L857	J0JHB0000021	FILTER	
L1501	ELF15N005A	LINE FILTER	⚠
L1502	J0JHB0000021	FILTER	
L1503	J0JHB0000021	FILTER	
L1504	VLQSAB7D220K	COIL 22UH	
L1505	VLQSAB7D100K	COIL 10UH	
L1506	ELEXT101KE04	COIL 100UH	
L1507	G0A100YA0001	COIL	
L1509	VLQSAB7D220K	COIL 22UH	
L1510	G0A100YA0001	COIL	
L1601	LSLF0035	EMI FILTER CHIP	
L1603	LSLF0035	EMI FILTER CHIP	
L1604	ELESN220KA	COIL 22UH	
L4701	ELESN101KA	COIL 100UH	
L5301	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
L5302	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
L5303	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
L5901	ELESN101KA	COIL 100UH	
L6401	ELEXT101KE04	COIL 100UH	
L6402	J0JBC0000022	CHIP BEAD INDUCTOR	
L6403	J0JBC0000022	CHIP BEAD INDUCTOR	
L6404	J0JBC0000022	CHIP BEAD INDUCTOR	
L6405	J0JBC0000022	CHIP BEAD INDUCTOR	
L7002	ELESN100KA	COIL 10UH	

CRYSTAL OSCILLATOR

Ref. No.	Part No.	Part Name & Description	Remarks
X5501	H2A503300012	CRYSTAL OSCILLATOR	
X5601	VSXS0208-A	CRYSTAL OSCILLATOR	
X6001	VSXS0784	CRYSTAL OSCILLATOR	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P552	K1MP04A00007	CONNECTOR 4P	
P801	LSJP0814	CONNECTOR 2P	
P850	K1KA02A00009	CONNECTOR 2P	
P1529	VEKS5894-FE	CONNECTOR CABLE W/PLUG,5V DC	
P4501	K1KA02A00229	CONNECTOR 2P	
P4502	K1KA02A00229	CONNECTOR 2P	
P4506	VEKS5886	CONNECTOR CABLE W/PLUG,12V DC	
P4801	K1MN16A00060	CONNECTOR 16P	
P5301	K1MP04A00006	CONNECTOR 4P	
P6001	K1KA05A00268	CONNECTOR 5P	

SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW6301	EVQ21405R	SWITCH PUSH	
SW6302	EVQ21405R	SWITCH PUSH	
SW6304	EVQ21405R	SWITCH PUSH	
SW6305	EVQ21405R	SWITCH PUSH	
SW6309	EVQ21405R	SWITCH PUSH	
SW6310	EVQ21405R	SWITCH PUSH	
SW6311	EVQ21405R	SWITCH PUSH	
SW6312	EVQ21405R	SWITCH PUSH	
SW6313	EVQ21405R	SWITCH PUSH	
SW6314	EVQ21405R	SWITCH PUSH	
SW6315	EVQ21405R	SWITCH PUSH	

FUSE& PROTECTOR

Ref. No.	Part No.	Part Name & Description	Remarks
F801	K5D632AQ0002	FUSE 125V 6.3A	⚠
F801	K5D632ADA001	FUSE 125V 6.3A	⚠
F801	K5D632ADA008	FUSE 125V 6.3A	⚠
F801	K5D632AD0002	FUSE 125V 6.3A	⚠
F1501	K5D302AQ0003	FUSE 125V 3A	⚠
F1501	K5D302ADA002	FUSE 125V 3A	⚠
F1501	K5D302ADA006	FUSE 125V 3A	⚠
F1501	K5D302AD0002	FUSE 125V 3A	⚠
PR850	LSSF009A70E	IC PROTECTOR	⚠
PR851	LSSF009A35E	IC PROTECTOR	⚠
PR1501	UNH000600A	IC PROTECTOR 1.5A	⚠
PR1501	B1ZAZ0000040	IC PROTECTOR 1.5A	⚠
PR1501	LSSF009A25E	IC PROTECTOR 1.5A	⚠
PR1502	UNH000600A	IC PROTECTOR 1.5A	⚠
PR1502	B1ZAZ0000040	IC PROTECTOR 1.5A	⚠
PR1502	LSSF009A25E	IC PROTECTOR 1.5A	⚠
PR1503	UNH000600A	IC PROTECTOR 1.5A	⚠
PR1503	B1ZAZ0000040	IC PROTECTOR 1.5A	⚠

Ref. No.	Part No.	Part Name & Description	Remarks
PR1503	LSSF009A25E	IC PROTECTOR 1.5A	⚠
PR1504	LSSF009A35E	IC PROTECTOR	⚠

RELAY

Ref. No.	Part No.	Part Name & Description	Remarks
RL591	LSSY0004	RELAY	⚠
RL591	K6B1AGA00034	RELAY	⚠
RL591	K6B1AGA00042	RELAY	⚠
RL591	TSEH0013	RELAY	⚠
RL591	TSEH1860-1	RELAY	⚠
RL801	LSSY0004	RELAY	⚠
RL801	K6B1AGA00034	RELAY	⚠
RL801	K6B1AGA00042	RELAY	⚠
RL801	TSEH0013	RELAY	⚠
RL801	TSEH1860-1	RELAY	⚠

TRANSFORMER

Ref. No.	Part No.	Part Name & Description	Remarks
T501	ETH19Y70AY	TRANSFORMER	
T551	KFT4AB408FU	FLYBACK TRANSFORMER	⚠
T850	ETS39AG3K5NC	TRANSFORMER	⚠
T1501	LSTP0125	TRANSFORMER	⚠

JACKS

Ref. No.	Part No.	Part Name & Description	Remarks
JK4591	K2HC103B0129	EARPHONE JACK SOCKET	
JK4701	K2HA306B0058	AUDIO/VIDEO JACK SOCKET	
JK4851	LSJJ0167	AUDIO/VIDEO JACK SOCKET	

PRINTED CIRCUIT BOARD ASSEMBLY

Ref. No.	Part No.	Part Name & Description	Remarks
E11	LSEP2120A	AUDIO C.B.A.	E.S.D. RTL
E12	LSEP2086A	OPTICAL AUDIO JACK C.B.A.	RTL
E13	LSEP2119A	Y/C SEPARATION C.B.A.	RTL

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
272	TMM77412	CLAMPER	
470	XTV3+10G	TAPPING SCREW,STEEL	
483	XYN3+F10S	SCREW W/WASHER,STEEL	
487	XYN3+J8	SCREW W/WASHER,STEEL	
711	PNA4611M00HC	INFRARED RECEIVER UNIT	
728	LSSC0254	HEAT SINK	
741	LSJA03492017	AC CORD W/PLUG,120V	⚠
743	ENG36715G	TUNER,UHF/VHF NR	
751	LML69001A	ANODE LEAD CLAMPER	
760	TUC77628	HEAT SINK	
771	EYF52BC	FUSE HOLDER	
772	LSSC0408	HEAT SINK	
797	LSSC0562	HEAT SINK	
799	LSSC0584	AMP HEAT SINK	

14.3.2. AUDIO C.B.A.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC4301	C0JBAR000002	IC, CMOS STANDARD LOGIC	E.S.D.
IC4301	CD4052BCM	IC, CMOS STANDARD LOGIC	E.S.D.
IC4303	C0JBAR000002	IC, CMOS STANDARD LOGIC	E.S.D.
IC4303	CD4052BCM	IC, CMOS STANDARD LOGIC	E.S.D.
IC4352	C0ABBB000017	IC, LINEAR	
IC4352	C1BB00000177	IC, LINEAR	
IC4601	BD3867AS	IC, LINEAR	
IC9001	AN5832SA-E1	IC, LINEAR	
IC9201	AN7420-NT	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q4301	UNR221200L	TRANSISTOR SI NPN CHIP	
Q4301	B1GBCFLL0002	TRANSISTOR SI NPN CHIP	
Q4302	UNR221200L	TRANSISTOR SI NPN CHIP	
Q4302	B1GBCFLL0002	TRANSISTOR SI NPN CHIP	
Q4303	UNR221200L	TRANSISTOR SI NPN CHIP	
Q4303	B1GBCFLL0002	TRANSISTOR SI NPN CHIP	
Q4304	UNR221200L	TRANSISTOR SI NPN CHIP	
Q4304	B1GBCFLL0002	TRANSISTOR SI NPN CHIP	
Q4351	2SD132800L	TRANSISTOR SI NPN CHIP	
Q4351	B1ABEC000006	TRANSISTOR SI NPN CHIP	
Q4352	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q4352	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q4353	2SD132800L	TRANSISTOR SI NPN CHIP	
Q4353	B1ABEC000006	TRANSISTOR SI NPN CHIP	
Q4354	UNR211L00L	TRANSISTOR SI PNP CHIP	
Q4355	UNR221L00L	TRANSISTOR SI NPN CHIP	
Q9001	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q9001	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q9002	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q9002	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q9201	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q9201	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q9202	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q9202	B1ABCF000020	TRANSISTOR SI NPN CHIP	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D4351	MA2C165001VT	DIODE SI	
D4351	B0AACK000004	DIODE SI	
D4351	1SS119	DIODE SI	
D4352	MA2C165001VT	DIODE SI	
D4352	B0AACK000004	DIODE SI	
D4352	1SS119	DIODE SI	
D4353	MA2C165001VT	DIODE SI	
D4353	B0AACK000004	DIODE SI	
D4353	1SS119	DIODE SI	
D4354	MA2C165001VT	DIODE SI	
D4354	B0AACK000004	DIODE SI	
D4354	1SS119	DIODE SI	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R4302	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4303	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4304	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4305	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4306	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4307	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4309	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4310	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4311	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4312	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4318	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4319	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4320	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4321	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4322	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4323	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4352	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4353	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4354	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4355	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4356	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R4357	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R4358	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4362	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4365	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4366	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R4368	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4369	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R4370	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4371	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R4372	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4374	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4375	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4376	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4377	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R4378	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4379	ERJ6GEYJ562V	MGF CHIP 1/10W 5.6K	
R4601	ERJ6GEYJ105V	MGF CHIP 1/10W 1M	
R4602	ERJ6GEYJ394V	MGF CHIP 1/10W 390K	
R4603	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4604	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4605	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4606	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R4607	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R4608	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R9001	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R9002	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R9003	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R9004	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R9005	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R9009	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R9010	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R9013	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R9014	ERJ6GEY0R00V	MGF CHIP 1/10W 0	

Ref. No.	Part No.	Part Name & Description	Remarks
R9201	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R9202	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R9203	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R9204	ERJ6GEYJ224V	MGF CHIP 1/10W 220K	
R9205	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R9206	EVMAASA00B53	VARIABLE 5K	
R9207	ERJ6GEYJ332V	MGF CHIP 1/10W 3.3K	
R9208	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R9209	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R9212	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R9213	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R9214	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R9215	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	
R9216	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R9217	ERJ6GEYJ472V	MGF CHIP 1/10W 4.7K	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C4301	ECEA1CKA101	ELECTROLYTIC 16V 100UF	
C4302	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4303	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4304	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4308	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4352	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4353	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4354	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4355	ECEA1CKA470	ELECTROLYTIC 16V 47UF	
C4356	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4357	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4358	ECEA1CKN100I	ELECTROLYTIC 16V 10UF	
C4359	ECEA1CKN100I	ELECTROLYTIC 16V 10UF	
C4361	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4362	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4365	ECEA1CKA101	ELECTROLYTIC 16V 100UF	
C4366	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C4601	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4602	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4603	ECJ2VB1E683K	C CHIP 25V 0.068UF	
C4604	ECJ2VB1H102K	C CHIP 50V 1000PF	
C4605	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4606	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4612	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4613	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4614	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4615	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4616	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C4617	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C4618	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4619	ECJ2VB1H102K	C CHIP 50V 1000PF	
C4620	ECJ2VB1E683K	C CHIP 25V 0.068UF	
C4621	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4622	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4623	ECA1CM471B	ELECTROLYTIC 16V 470	

Ref. No.	Part No.	Part Name & Description	Remarks
C9001	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C9002	ECEA1HKAR33I	ELECTROLYTIC 50V 0.33UF	
C9003	ECEA1HKA3R3	ELECTROLYTIC 50V 3.3UF	
C9004	ECJ2VB1C104K	C CHIP 16V 0.1UF	
C9005	ECJ2VB1E223K	C CHIP 25V 0.022UF	
C9006	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C9007	ECJ2VB1H333K	C CHIP 50V 0.033UF	
C9008	ECEA1HKA2R2	ELECTROLYTIC 50V 2.2UF	
C9009	ECEA1HKAR33I	ELECTROLYTIC 50V 0.33UF	
C9010	ECJ2VB1E104K	C CHIP 25V 0.1UF	
C9011	ECJ2VF1C224Z	C CHIP 16V 0.22UF	
C9013	ECJ2VB1H102K	C CHIP 50V 1000PF	
C9014	ECEA1HKA4R7	ELECTROLYTIC 50V 4.7UF	
C9015	ECEA1HKA2R2	ELECTROLYTIC 50V 2.2UF	
C9016	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C9017	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C9019	ECEA1HKA2R2	ELECTROLYTIC 50V 2.2UF	
C9022	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C9024	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C9025	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C9201	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C9202	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C9203	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C9204	ECQP1H102JZ3	POLYESTER 50V 1000PF	
C9205	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C9206	ECEA1HKA3R3	ELECTROLYTIC 50V 3.3UF	
C9207	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C9208	ECJ2VB1E223K	C CHIP 25V 0.022UF	
C9209	ECJ2VB1E223K	C CHIP 25V 0.022UF	
C9210	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C9211	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C9212	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C9213	ECEA1CKA220	ELECTROLYTIC 16V 22UF	
C9214	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C9215	ECEA1HKA010	ELECTROLYTIC 50V 1UF	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L4351	ELESN101KA	COIL 100UH	
L4601	ELESN101KA	COIL 100UH	
L9001	ELESN101KA	COIL 100UH	
L9201	ELESN101KA	COIL 100UH	
L9202	ELESN101KA	COIL 100UH	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P4201	VJHS0293	PACK PIN 3P	
P4202	VJHS0297	PACK PIN 7P	
P4203	VJHS0293	PACK PIN 3P	
P4204	VJHS0297	PACK PIN 7P	
P4205	VJHS0293	PACK PIN 3P	
P4206	VJHS0293	PACK PIN 3P	
P4207	VJHS0297	PACK PIN 7P	
P4208	VJHS0297	PACK PIN 7P	
P4209	VJHS0297	PACK PIN 7P	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
713	VMAS1912	P.C.B. SUPPORT ANGLE	

14.3.3. OPTICAL AUDIO JACK C.B.A.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC4751	B3RAE0000007	IC, JACK OPTICAL OUTPUT	
IC4751	B3RAE0000026	IC, JACK OPTICAL OUTPUT	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P4751	VJHS0293	PACK PIN 3P	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
713	VMAS1912	P.C.B. SUPPORT ANGLE	

14.3.4. Y/C SEPARATION C.B.A.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC5651	C1AB00001288	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q5651	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q5651	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q5652	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5652	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5653	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q5653	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q5655	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5655	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5656	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5656	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5657	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5657	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q5658	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q5658	B1ABCF000020	TRANSISTOR SI NPN CHIP	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R5651	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R5652	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5653	ERJ6GEYJ682V	MGF CHIP 1/10W 6.8K	
R5654	ERJ6GEYJ152V	MGF CHIP 1/10W 1.5K	
R5655	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5656	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R5657	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R5659	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R5660	ERJ6GEYJ821V	MGF CHIP 1/10W 820	
R5661	ERJ6GEYJ391V	MGF CHIP 1/10W 390	
R5662	ERJ6GEYJ391V	MGF CHIP 1/10W 390	
R5663	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R5665	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5666	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R5668	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5670	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5674	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R5675	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R5676	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R5677	ERJ6GEYJ122V	MGF CHIP 1/10W 1.2K	
R5678	ERJ6GEYJ392V	MGF CHIP 1/10W 3.9K	
R5679	ERJ6GEYJ101V	MGF CHIP 1/10W 100	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C5652	ECJ2VC1H100C	C CHIP 50V 10PF	
C5653	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5654	ECEA1HKA010	ELECTROLYTIC 50V 1UF	
C5655	ECJ2VC1H270J	C CHIP 50V 27PF	
C5656	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C5657	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C5658	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5659	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5660	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5661	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C5662	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C5663	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5664	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5665	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5666	ECEA0JKA220	ELECTROLYTIC 6.3V 22UF	
C5668	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5669	ECJ2VC1H181J	C CHIP 50V 180PF	
C5670	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5671	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5672	ECJ2VF1H103Z	C CHIP 50V 0.01UF	
C5673	ECJ2VC1H560J	C CHIP 50V 56PF	
C5674	ECJ2VC1H390J	C CHIP 50V 39PF	
C5675	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C5676	ECEA1CKA220	ELECTROLYTIC 16V 22UF	
C5677	ECJ2VF1E104Z	C CHIP 25V 0.1UF	
C5678	ECEA1CKS220I	ELECTROLYTIC 16V 22UF	
C5680	ECJ2VC1H270J	C CHIP 50V 27PF	
C5681	ECJ2VF1H103Z	C CHIP 50V 0.01UF	

FILTERS

Ref. No.	Part No.	Part Name & Description	Remarks
FL5651	LSLF0053	EMI FILTER	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L5652	ELESN150KA	COIL 15UH	
L5653	LSLQF06R101K	COIL 100UH	
L5654	ELESN4R7KA	COIL 4.7UH	
L5655	ELESN101KA	COIL 100UH	
L5656	ELESN101KA	COIL 100UH	
L5657	ELESN101KA	COIL 100UH	
L5658	ELESN101KA	COIL 100UH	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P5651	VJHS0293	PACK PIN 3P	
P5652	VJHS0297	PACK PIN 7P	

14.3.5. CRT C.B.A.

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q351	2SC3063	TRANSISTOR SI NPN	
Q351	2SC3271F-N	TRANSISTOR SI NPN	
Q351	2SC3619	TRANSISTOR SI NPN	
Q352	2SC3063	TRANSISTOR SI NPN	
Q352	2SC3271F-N	TRANSISTOR SI NPN	
Q352	2SC3619	TRANSISTOR SI NPN	
Q353	2SC3063	TRANSISTOR SI NPN	
Q353	2SC3271F-N	TRANSISTOR SI NPN	
Q353	2SC3619	TRANSISTOR SI NPN	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D351	MAZ41500MF	DIODE ZENER 15V	
D351	B0BA01400041	DIODE ZENER 15V	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R351	ERG2ANJ153H	METAL OXIDE 2W 15K	
R352	ERG2ANJ153H	METAL OXIDE 2W 15K	
R353	ERG2ANJ153H	METAL OXIDE 2W 15K	
R354	ERD25TJ272	CARBON 1/4W 2.7K	
R355	ERD25TJ272	CARBON 1/4W 2.7K	
R356	ERD25TJ272	CARBON 1/4W 2.7K	
R357	ERDS2TJ332	CARBON 1/4W 3.3K	
R358	ERDS2TJ332	CARBON 1/4W 3.3K	
R359	ERDS2TJ332	CARBON 1/4W 3.3K	
R360	ERDS2TJ331	CARBON 1/4W 330	
R361	ERDS2TJ331	CARBON 1/4W 330	
R362	ERDS2TJ331	CARBON 1/4W 330	
R363	ERDS2TJ101	CARBON 1/4W 100	
R364	ERDS2TJ101	CARBON 1/4W 100	
R365	ERDS2TJ101	CARBON 1/4W 100	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C351	F1D1H681A012	CERAMIC 50V 680PF	
C352	F1D1H681A012	CERAMIC 50V 680PF	
C353	F1D1H681A012	CERAMIC 50V 680PF	
C354	F1B3D1020008	CERAMIC 2KV 1000PF	
C357	ECA1CM220B	ELECTROLYTIC 16V 22UF	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P351	LSJWR4N520AC	CONNECTOR CABLE W/OUT PLUG,12V DC	
P352	LSJWS4N430AC	CONNECTOR CABLE W/OUT PLUG,220V DC	
P353	K3B09CA00005	CRT SOCKET	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
153	TMM7443-1	CLAMPER	

14.3.6. DVD MAIN C.B.A.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC8001	MN2DS0002VP	IC, LINEAR	
IC8002	LSSK0024	IC, 4K EEP ROM	E.S.D.
IC8003	C1DB00000918	IC, LINEAR	
IC8005	C0DBZFZ00011	IC, LINEAR	
IC8005	C0DBZFZ00010	IC, LINEAR	
IC8201	LSSK0020	IC, 16MBIT FLASH MEMORY	E.S.D.
IC8202	C0JBAH000074	IC, CMOS STANDARD LOGIC	E.S.D.
IC8202	C0JBAH000078	IC, CMOS STANDARD LOGIC	E.S.D.
IC8203	C0JBAH000074	IC, CMOS STANDARD LOGIC	E.S.D.
IC8203	C0JBAH000078	IC, CMOS STANDARD LOGIC	E.S.D.
IC8204	C3ABQJ000001	IC, 128MBIT SD RAM	E.S.D.
IC8204	C3ABQJ000005	IC, 128MBIT SD RAM	E.S.D.
IC8204	C3ABQJ000012	IC, 128MBIT SD RAM	E.S.D.
IC8501	C0FBBK000035	IC, LINEAR	
IC8503	AN6552S	IC, LINEAR	
IC8801	C0GBL0000003	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q8401	2SB1218ARL	TRANSISTOR SI PNP CHIP	
Q8402	2SB1218ARL	TRANSISTOR SI PNP CHIP	
Q8403	2SB1218ARL	TRANSISTOR SI PNP CHIP	
Q8404	2SB1218ARL	TRANSISTOR SI PNP CHIP	
Q8601	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q8601	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q8602	2SD0601A0L	TRANSISTOR SI NPN CHIP	
Q8602	B1ABCF000011	TRANSISTOR SI NPN CHIP	
Q8603	2SB14400RL	TRANSISTOR SI PNP CHIP	
Q8603	2SB14400SL	TRANSISTOR SI PNP CHIP	
Q8901	UNR521100L	TRANSISTOR SI NPN CHIP	
Q8901	B1GBCFJJ0007	TRANSISTOR SI NPN CHIP	
Q8902	UNR511500L	TRANSISTOR SI PNP CHIP	
Q8902	B1GDCFJJ0025	TRANSISTOR SI PNP CHIP	
Q8905	B1CFGD000002	TRANSISTOR FET CHIP	
Q8905	XP0187800L	TRANSISTOR FET CHIP	
Q8906	2SB0709A0L	TRANSISTOR SI PNP CHIP	
Q8906	B1ADCF000001	TRANSISTOR SI PNP CHIP	
Q8907	2SB0709A0L	TRANSISTOR SI PNP CHIP	
Q8907	B1ADCF000001	TRANSISTOR SI PNP CHIP	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R8001	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R8002	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R8004	ERJ12YJ1R0U	MGF CHIP 1/2W 1	
R8005	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R8013	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R8014	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R8017	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8020	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8021	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8022	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8023	ERJ3GEYJ270V	MGF CHIP 1/16W 27	
R8024	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8028	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8031	ERJ3GEYF153V	MGF CHIP 1/16W 15K	
R8032	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R8033	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R8034	ERJ3GEYF153V	MGF CHIP 1/16W 15K	
R8036	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8042	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8043	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8044	EVM3YSX50B23	VARIABLE 2K	
R8045	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8048	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8049	ERJ3GEYJ561V	MGF CHIP 1/16W 560	
R8050	ERJ3GEYJ561V	MGF CHIP 1/16W 560	
R8051	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8202	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8212	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8213	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8223	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8226	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8230	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8235	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8239	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R8241	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R8242	EXB38V100JV	ARRAY CHIP 1/16W 10	
R8244	EXB38V100JV	ARRAY CHIP 1/16W 10	
R8248	EXB38V100JV	ARRAY CHIP 1/16W 10	
R8249	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R8253	EXB38V100JV	ARRAY CHIP 1/16W 10	
R8259	EXB38V100JV	ARRAY CHIP 1/16W 10	
R8263	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8267	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8268	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8272	EXB38V330JV	ARRAY CHIP 1/16W 33	
R8401	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8402	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8403	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8404	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8405	ERJ3GEYJ302V	MGF CHIP 1/16W 3K	
R8406	ERJ3GEYJ302V	MGF CHIP 1/16W 3K	
R8409	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8410	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8423	ERJ3GEYJ101V	MGF CHIP 1/16W 100	

Ref. No.	Part No.	Part Name & Description	Remarks
R8424	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8425	ERJ3GEYJ750V	MGF CHIP 1/16W 75	
R8426	ERJ3GEYJ360V	MGF CHIP 1/16W 36	
R8427	ERJ3GEYJ360V	MGF CHIP 1/16W 36	
R8501	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8502	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8503	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8504	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8518	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R8520	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R8533	ERJ3GEYF153V	MGF CHIP 1/16W 15K	
R8534	ERJ3GEYJ622V	MGF CHIP 1/16W 6.2K	
R8535	ERJ3GEYF153V	MGF CHIP 1/16W 15K	
R8536	ERJ3GEYJ622V	MGF CHIP 1/16W 6.2K	
R8557	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8558	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8565	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R8566	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8567	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R8568	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8569	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8604	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8605	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8606	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8608	ERJ3GEYF392V	MGF CHIP 1/16W 3.9K	
R8626	ERJ3GEYF153V	MGF CHIP 1/16W 15K	
R8627	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8628	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8629	ERJ3GEYJ683V	MGF CHIP 1/16W 68K	
R8631	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8632	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8633	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8634	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8637	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8638	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8639	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8640	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8643	ERJ3GEYJ271V	MGF CHIP 1/16W 270	
R8644	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R8645	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8646	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R8647	ERJ3GEYJ682V	MGF CHIP 1/16W 6.8K	
R8648	ERJ3GEYJ203V	MGF CHIP 1/16W 20K	
R8649	ERJ3GEYJ203V	MGF CHIP 1/16W 20K	
R8650	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8801	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8807	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R8808	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8809	ERJ8GEYJ1R0Z	MGF CHIP 1/8W 1	
R8810	ERJ8GEYJ1R0Z	MGF CHIP 1/8W 1	
R8811	ERJ8GEYJ1R0Z	MGF CHIP 1/8W 1	
R8812	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R8813	ERJ6GEYJ1R0V	MGF CHIP 1/10W 1	
R8814	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	

Ref. No.	Part No.	Part Name & Description	Remarks
R8815	ERJ6GEYJ1R0V	MGF CHIP 1/10W 1	
R8816	ERJ6GEYJ1R0V	MGF CHIP 1/10W 1	
R8817	ERJ6GEYJ1R0V	MGF CHIP 1/10W 1	
R8818	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8901	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8905	ERJ3GEYJ823V	MGF CHIP 1/16W 82K	
R8907	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R8909	ERJ8GEYJ100V	MGF CHIP 1/8W 10	
R8910	ERJ8GEYJ100V	MGF CHIP 1/8W 10	
R8911	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R8912	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8913	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8914	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8915	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8916	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8921	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8922	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8923	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8924	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8925	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8926	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8927	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8928	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8929	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8930	ERJ3GEY0R00V	MGF CHIP 1/16W 0	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C8001	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8002	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8005	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C8006	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C8007	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8008	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8009	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8010	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8011	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8012	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8013	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8014	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C8015	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8016	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8017	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8018	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8019	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8020	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8021	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8022	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8023	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8024	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8025	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8026	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8027	ECJ1VB0J105K	C CHIP 6.3V 1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C8028	ECJ1VC1H330J	C CHIP 50V 33PF	
C8029	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8030	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8031	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8032	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8033	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8034	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8035	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8036	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8037	ECJ1VC1H080C	C CHIP 50V 8PF	
C8038	ECJ1VC1H080C	C CHIP 50V 8PF	
C8039	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C8040	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8041	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8201	ECEA0JKA331	ELECTROLYTIC 6.3V 330UF	
C8202	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8203	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8204	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8205	ECEA0JKA331	ELECTROLYTIC 6.3V 330UF	
C8206	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8207	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8208	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8209	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8210	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8211	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8212	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8213	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8214	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8215	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8216	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8217	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8412	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C8413	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8414	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8415	ECJ1VC1H220J	C CHIP 50V 22PF	
C8416	ECJ1VC1H220J	C CHIP 50V 22PF	
C8417	ECJ1VC1H390J	C CHIP 50V 39PF	
C8418	ECJ1VC1H390J	C CHIP 50V 39PF	
C8419	ECJ1VC1H390J	C CHIP 50V 39PF	
C8420	ECJ1VC1H390J	C CHIP 50V 39PF	
C8421	ECJ1VC1H220J	C CHIP 50V 22PF	
C8422	ECJ1VC1H220J	C CHIP 50V 22PF	
C8423	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8424	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8425	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C8504	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8505	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8506	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8507	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8508	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8512	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8513	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8520	ECEA1AKA330I	ELECTROLYTIC 10V 33UF	
C8521	ECEA1CKA101	ELECTROLYTIC 16V 100UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C8522	ECJ1VF1C104Z	C CHIP 16V 0.1UF	
C8523	ECEA1AKA330I	ELECTROLYTIC 10V 33UF	
C8536	ECJ1VC1H101J	C CHIP 50V 100PF	
C8537	ECJ1VC1H101J	C CHIP 50V 100PF	
C8544	ECJ1VB1H102K	C CHIP 50V 1000PF	
C8545	ECJ1VB1H102K	C CHIP 50V 1000PF	
C8553	ECJ1VB1H472K	C CHIP 50V 4700PF	
C8555	ECJ1VB1H472K	C CHIP 50V 4700PF	
C8568	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8569	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C8571	ECEA0JKA101	ELECTROLYTIC 6.3V 100UF	
C8572	ECEA0JKA331	ELECTROLYTIC 6.3V 330UF	
C8573	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8574	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8603	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8604	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8605	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8606	ECJ1VB1E333K	C CHIP 25V 0.033UF	
C8607	ECJ1VC1H330J	C CHIP 50V 33PF	
C8608	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8610	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8611	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8612	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8613	ECJ1VC1H101J	C CHIP 50V 100PF	
C8614	ECJ1VB1E183K	C CHIP 25V 0.018UF	
C8615	ECJ1VB1H562K	C CHIP 50V 5600PF	
C8616	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8619	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8620	ECJ1VC1H221J	C CHIP 50V 220PF	
C8621	ECJ1VB0J103K	C CHIP 6.3V 0.01UF	
C8622	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8624	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8625	ECJ1VB1C153K	C CHIP 16V 0.015UF	
C8626	ECJ1VB1C104K	C CHIP 16V 0.1UF	
C8630	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C8632	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C8638	ECJ1VB1C104K	C CHIP 16V 0.1UF	
C8639	ECJ1VB1C104K	C CHIP 16V 0.1UF	
C8640	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8642	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8643	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8644	ECJ1VC1H560J	C CHIP 50V 56PF	
C8645	ECJ1VC1H560J	C CHIP 50V 56PF	
C8648	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8649	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8650	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8651	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8652	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8653	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C8806	F1K1A106A005	C CHIP 10V 10UF	
C8808	F1K1A106A005	C CHIP 10V 10UF	
C8809	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8810	ECJ1VC1H391J	C CHIP 50V 390PF	
C8811	ECJ1VB1C104K	C CHIP 16V 0.1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C8812	ECJ1VB1C104K	C CHIP 16V 0.1UF	
C8813	ECJ1VC1H391J	C CHIP 50V 390PF	
C8814	ECJ1VB1A105K	C CHIP 16V 1UF	
C8815	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8816	ECJ1VB1H472K	C CHIP 50V 4700PF	
C8817	F1K1A106A005	C CHIP 10V 10UF	
C8818	F1K1A106A005	C CHIP 10V 10UF	
C8901	ECJ1VC1H680J	C CHIP 50V 68PF	
C8904	ECJ1VC1H471J	C CHIP 50V 470PF	
C8905	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8906	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C8907	ECJ1VC1H221J	C CHIP 50V 220PF	
C8911	ECJ1VC1H561J	C CHIP 50V 560PF	

FILTERS

Ref. No.	Part No.	Part Name & Description	Remarks
FL8401	F1Z1E2220002	EMI FILTER CHIP	
FL8402	J0HAAG000015	EMI FILTER CHIP	
FL8403	J0HAAG000015	EMI FILTER CHIP	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L8002	J0JHC0000027	EMI FILTER CHIP	
L8003	J0JDC0000002	EMI FILTER CHIP	
L8004	J0JCC0000117	EMI FILTER CHIP	
L8005	J0JCC0000215	EMI FILTER CHIP	
L8006	J0JCC0000215	EMI FILTER CHIP	
L8007	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8401	J0JDC0000002	EMI FILTER CHIP	
L8402	G1C270MA0021	INDUCTOR CHIP	
L8403	G1C270MA0021	INDUCTOR CHIP	
L8404	G1C330MA0021	INDUCTOR CHIP	
L8405	G1C330MA0021	INDUCTOR CHIP	
L8406	G1C270MA0021	INDUCTOR CHIP	
L8407	G1C270MA0021	INDUCTOR CHIP	
L8408	J0JDC0000002	EMI FILTER CHIP	
L8411	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8412	J0JHC0000068	EMI FILTER CHIP	
L8413	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8418	J0JBC0000010	EMI FILTER CHIP	
L8419	J0JBC0000010	EMI FILTER CHIP	
L8420	J0JBC0000010	EMI FILTER CHIP	
L8421	J0JBC0000010	EMI FILTER CHIP	
L8422	J0JBC0000010	EMI FILTER CHIP	
L8423	J0JBC0000010	EMI FILTER CHIP	
L8424	J0JBC0000010	EMI FILTER CHIP	
L8426	J0JHC0000078	EMI FILTER CHIP	
L8427	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
L8429	J0JHC0000078	EMI FILTER CHIP	
L8431	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8434	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8501	J0JBC0000010	EMI FILTER CHIP	

Ref. No.	Part No.	Part Name & Description	Remarks
L8503	J0JBC0000010	EMI FILTER CHIP	
L8504	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8516	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8517	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8601	J0JDC0000002	EMI FILTER CHIP	
L8602	J0JDC0000002	EMI FILTER CHIP	
L8620	J0JDC0000002	EMI FILTER CHIP	

CRYSTAL OSCILLATOR

Ref. No.	Part No.	Part Name & Description	Remarks
X8001	H0J368500019	CRYSTAL OSCILLATOR	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
P8401	K1MN16A00060	CONNECTOR 16P	
P8402	K1MR10B00029	CONNECTOR 10P	
P8801	K1MN13B00062	CONNECTOR 13P	
P8901	K1MN26B00076	CONNECTOR 26P	

14.3.7. DVD SUB C.B.A.

SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW8952	K0L1BA000015	SWITCH PUSH	
SW8953	K0L1BA000014	SWITCH PUSH	

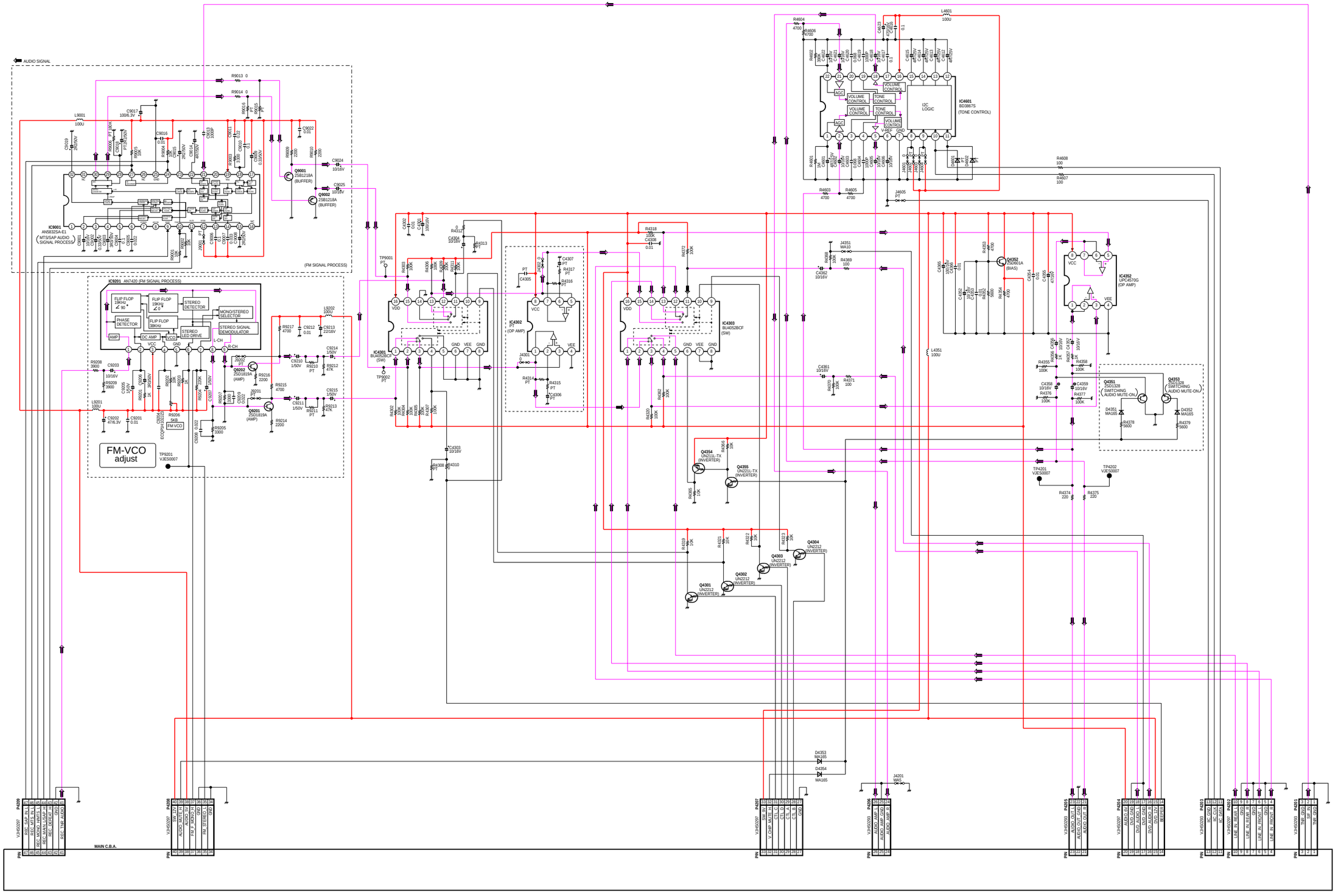
15. SCHEMATIC DIAGRAMS FOR PRINTING WITH LETTER SIZE

AUDIO SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.



LINK TO VOLTAGE CHART

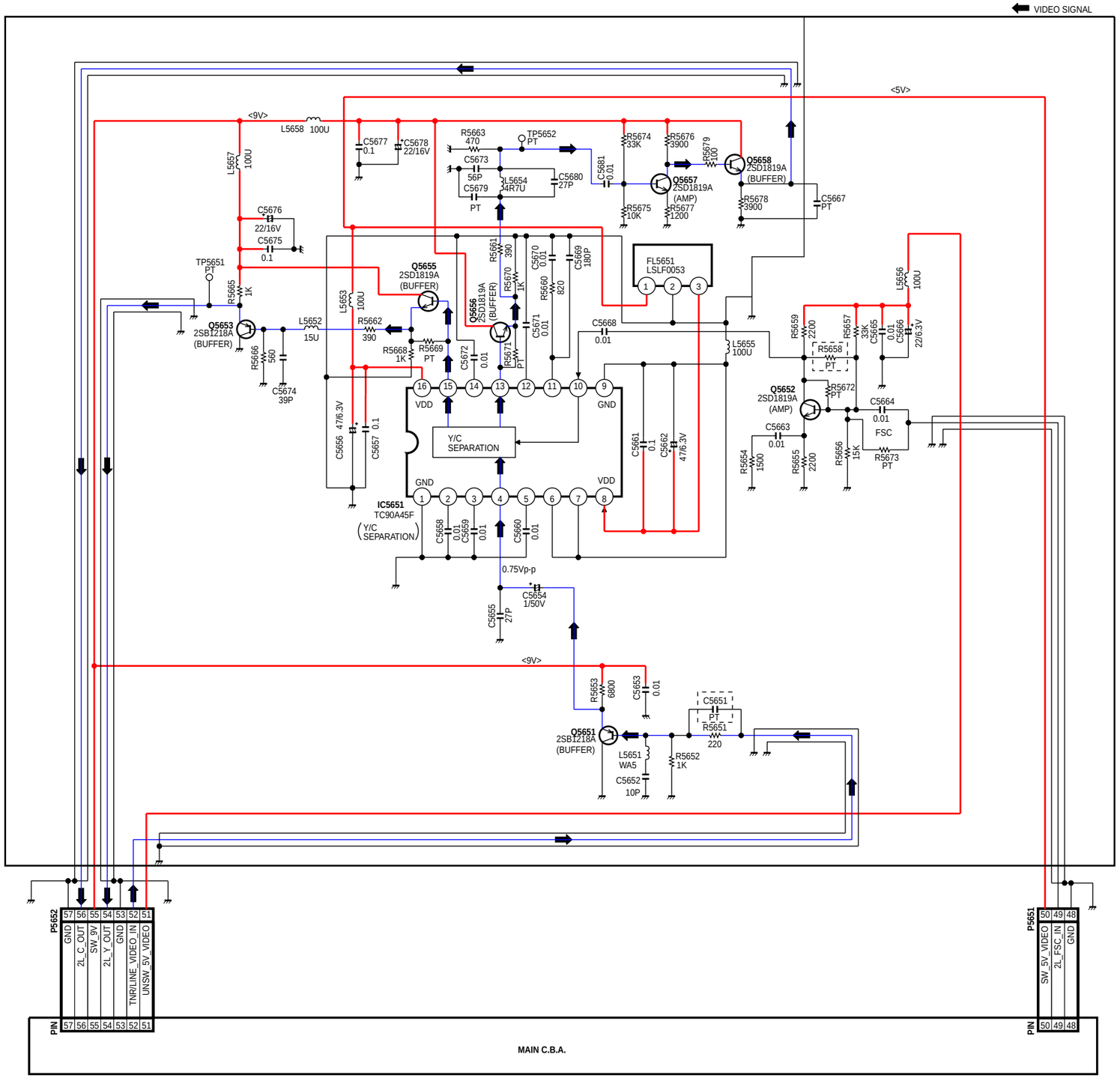
LSJB2120
AUDIO SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

Y/C SEPARATION SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.



LINK TO VOLTAGE CHART

LSJB2119
Y/C SEPARATION SCHEMATIC
PV-20D53/PV-27D53

CRT SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

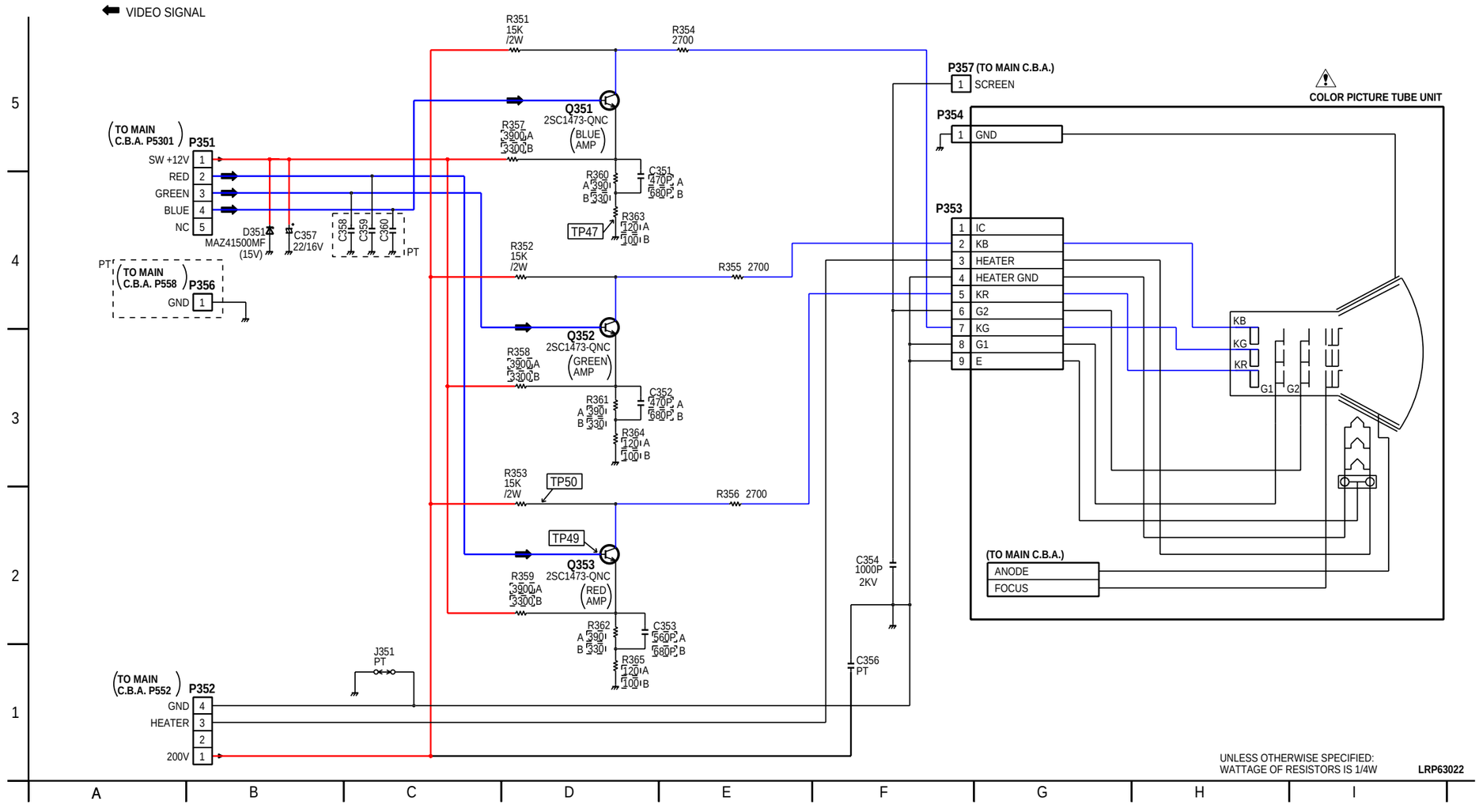
NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-20D53	A
PV-27D53	B
Not Used	PT



LINK TO VOLTAGE CHART

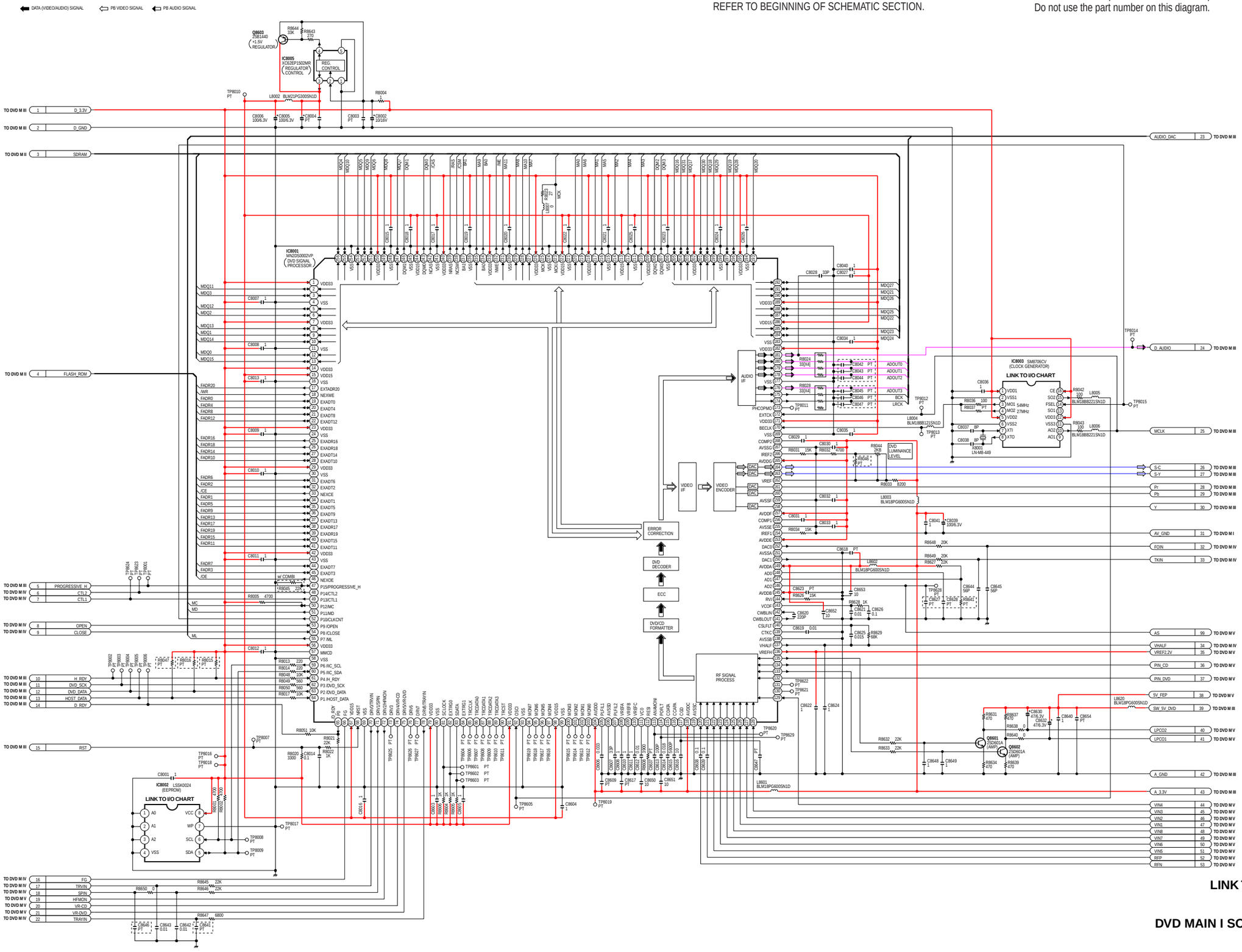
LRP63022
CRT SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

DVD MAIN I SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.



LINK TO VOLTAGE CHART

LSJB2091
DVD MAIN I SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

I/O CHART OF IC8002

Pin No.	I/O	Signal Name	Description
1	-	A0	(Not used)
2	-	A1	(Not used)
3	-	A2	(Not used)
4	-	VSS	Ground
5	I/O	SDA	Serial data
6	I	SCL	Serial clock
7	-	WP	Write protect
8	I	VCC	+3.3V

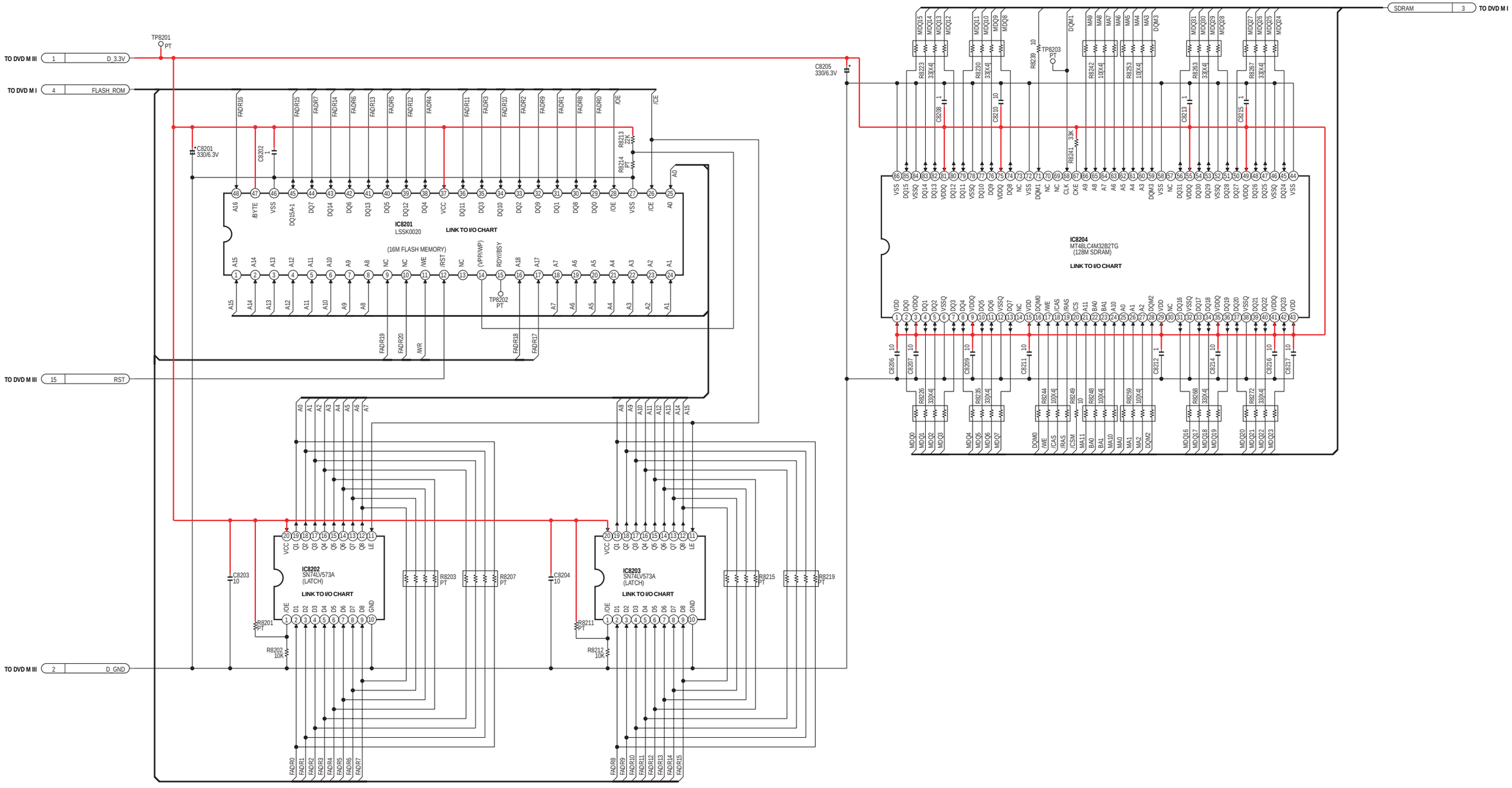
I/O CHART OF IC8003

Pin No.	I/O	Signal Name	Description
1	I	VDD1	+3.3V
2	I	VSS1	Ground
3	I	MO1	54 MHz clock
4	I	MO2	27 MHz clock
5	I	VDD2	+3.3V
6	I	VSS2	Ground
7	I	XTI	Clock
8	I	XTO	Clock
9	I	AO1	(Not used)
10	I	AO2	768 fs output
11	I	VSS3	Ground
12	I	VDD3	+3.3V
13	-	SO1	(Not used)
14	-	FSEL	Frequency select (48 kHz : high / 44.1 kHz : low)
15	I	SO2	33.8688 MHz
16	I	CE	Chip enable : high

DVD MAIN II SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.



LINK TO VOLTAGE CHART

LSJB2091
DVD MAIN II SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

I/O CHART OF IC8201

Pin No.	I/O	Signal Name	Description
1	I	A15	Memory address 16
2	I	A14	Memory address 15
3	I	A13	Memory address 14
4	I	A12	Memory address 13
5	I	A11	Memory address 12
6	I	A10	Memory address 11
7	I	A9	Memory address 10
8	I	A8	Memory address 9
9	I	NC	Memory address 20
10	I	NC	Memory address 21
11	I	/WE	Write enable : low
12	I	/RST	Reset : low
13	-	NC	(Not used)
14	-	VPP/WP	(Not used)
15	I	RDY/BSY	DVD Ready (Busy : low)
16	I	A18	Memory address 19
17	I	A17	Memory address 18
18	I	A7	Memory address 8
19	I	A6	Memory address 7
20	I	A5	Memory address 6
21	I	A4	Memory address 5
22	I	A3	Memory address 4
23	I	A2	Memory address 3
24	I	A1	Memory address 2
25	I	A0	Memory address 1
26	I	/CE	Memory chip select : low
27	-	VSS	Ground
28	I	/OE	Output enable : low
29	I/O	DQ0	Memory data 0
30	I/O	DQ8	Memory data 8
31	I/O	DQ1	Memory data 1
32	I/O	DQ9	Memory data 9
33	I/O	DQ2	Memory data 2
34	I/O	DQ10	Memory data 10
35	I/O	DQ3	Memory data 3
36	I/O	DQ11	Memory data 11
37	I	VCC	+3.3V
38	I/O	DQ4	Memory data 4
39	I/O	DQ12	Memory data 12
40	I/O	DQ5	Memory data 5
41	I/O	DQ13	Memory data 13
42	I/O	DQ6	Memory data 6
43	I/O	DQ14	Memory data 14
44	I/O	DQ7	Memory data 7
45	I/O	DQ15A-1	Memory data 15
46	-	VSS	Ground
47	I	/BYTE	+3.3V
48	I	A16	Memory address 16

I/O CHART OF IC8202

Pin No.	I/O	Signal Name	Description
1	-	/OE	Output enable : low
2	I	D1	Memory data 0
3	I	D2	Memory data 1
4	I	D3	Memory data 2
5	I	D4	Memory data 3
6	I	D5	Memory data 4
7	I	D6	Memory data 5
8	I	D7	Memory data 6
9	I	D8	Memory data 7
10	-	GND	Ground
11	I	LE	Memory chip select : low
12	O	Q8	Memory address 8
13	O	Q7	Memory address 7
14	O	Q6	Memory address 6
15	O	Q5	Memory address 5
16	O	Q4	Memory address 4
17	O	Q3	Memory address 3
18	O	Q2	Memory address 2
19	O	Q1	Memory address 1
20	I	VCC	+3.3V

I/O CHART OF IC8203

Pin No.	I/O	Signal Name	Description
1	-	/OE	Output enable : low
2	I	D1	Memory data 0
3	I	D2	Memory data 1
4	I	D3	Memory data 2
5	I	D4	Memory data 3
6	I	D5	Memory data 4
7	I	D6	Memory data 5
8	I	D7	Memory data 6
9	I	D8	Memory data 7
10	-	GND	Ground
11	I	LE	Memory chip select : low
12	O	Q8	Memory address 8
13	O	Q7	Memory address 7
14	O	Q6	Memory address 6
15	O	Q5	Memory address 5
16	O	Q4	Memory address 4
17	O	Q3	Memory address 3
18	O	Q2	Memory address 2
19	O	Q1	Memory address 1
20	I	VCC	+3.3V

I/O CHART OF IC8204

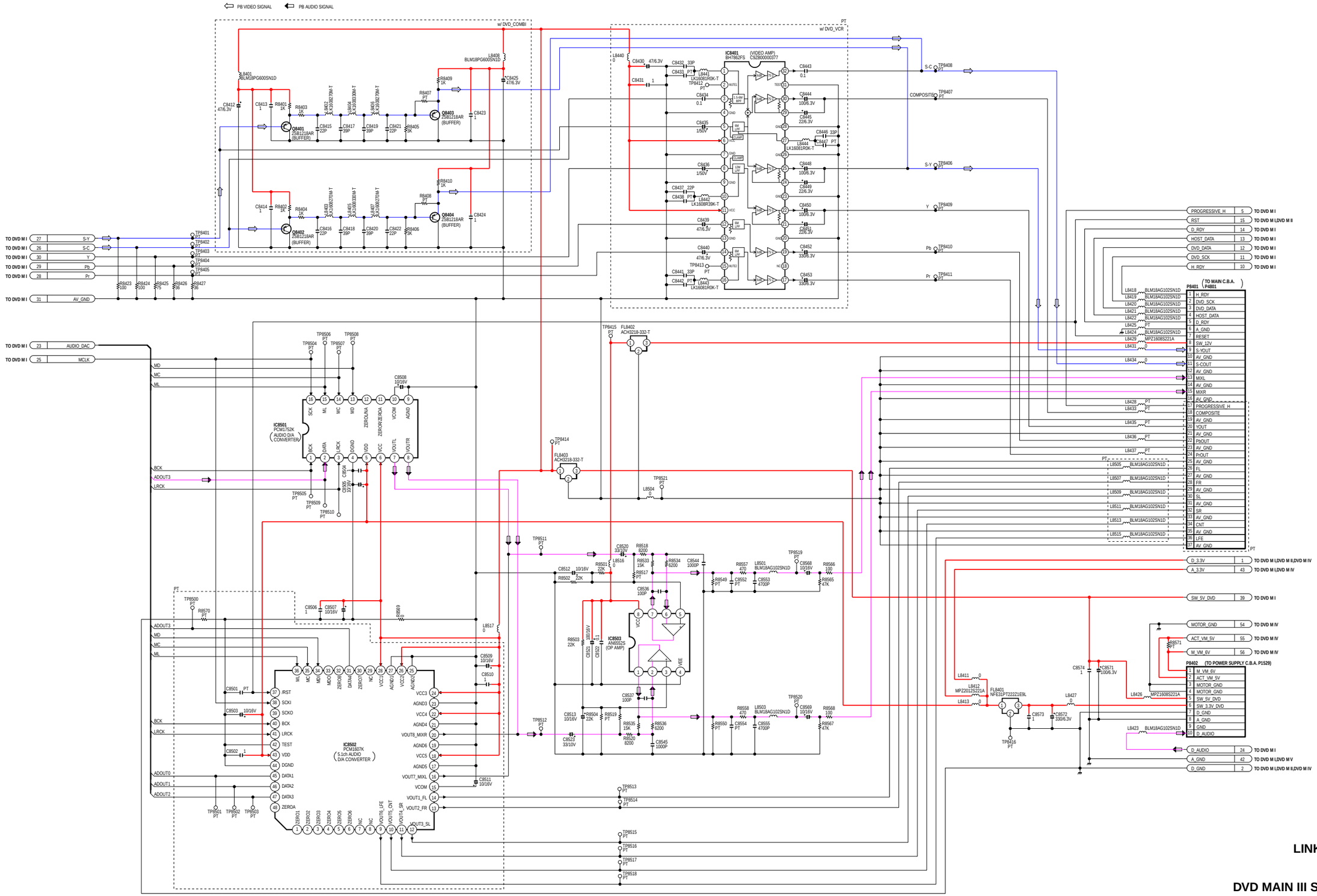
Pin No.	I/O	Signal Name	Description
1	I	VDD	+3.3V
2	I/O	DQ0	SDRAM data 0
3	I	VDDQ	+3.3V
4	I/O	DQ1	SDRAM data 1
5	I/O	DQ2	SDRAM data 2
6	-	VSSQ	Ground
7	I/O	DQ3	SDRAM data 3
8	I/O	DQ4	SDRAM data 4
9	I	VDDQ	+3.3V
10	I/O	DQ5	SDRAM data 5
11	I/O	DQ6	SDRAM data 6
12	-	VSSQ	Ground
13	I/O	DQ7	SDRAM data 7
14	-	NC	(Not used)
15	I	VDD	+3.3V
16	I	DQM0	Data input/output mask 0
17	I	/WE	Write enable : low
18	I	/CAS	Column address strobe : low
19	I	/RAS	Row address strobe :low
20	I	/CS	SDRAM chip select : low
21	I	All	SDRAM address 11
22	I	BA0	Bank address 0
23	I	BA1	Bank address 1
24	I	A10	SDRAM address 10
25	I	A0	SDRAM address 0
26	I	A1	SDRAM address 1
27	I	A2	SDRAM address 2
28	I	DQM2	Data input/output mask 2
29	I	VDD	+3.3V
30	-	NC	(Not used)
31	I/O	DQ16	SDRAM data 16
32	-	VSSQ	Ground
33	I/O	DQ17	SDRAM data 17
34	I/O	DQ18	SDRAM data 18
35	I	VDDQ	+3.3V
36	I/O	DQ19	SDRAM data 19
37	I/O	DQ20	SDRAM data 20
38	-	VSSQ	Ground
39	I/O	DQ21	SDRAM data 21
40	I/O	DQ22	SDRAM data 22
41	I	VDDQ	+3.3V
42	I/O	DQ23	SDRAM data 23
43	I	VDD	+3.3V
44	-	VSS	Ground
45	I/O	DQ24	SDRAM data 24
46	-	VSSQ	Ground
47	I/O	DQ25	SDRAM data 25
48	I/O	DQ26	SDRAM data 26
49	I	VDDQ	+3.3V
50	I/O	DQ27	SDRAM data 27
51	I/O	DQ28	SDRAM data 28
52	-	VSSQ	Ground
53	I/O	DQ29	SDRAM data 29
54	I/O	DQ30	SDRAM data 30
55	I	VDDQ	+3.3V
56	I/O	DQ31	SDRAM data 31
57	-	NC	(Not used)
58	-	VSS	Ground
59	I	DQM3	Data input/output mask 3
60	I	A3	SDRAM address 3
61	I	A4	SDRAM address 4
62	I	A5	SDRAM address 5
63	I	A6	SDRAM address 6
64	I	A7	SDRAM address 7
65	I	A8	SDRAM address 8
66	I	A9	SDRAM address 9
67	-	CKE	(Not used)
68	I	CLK	SDRAM clock
69	-	NC	(Not used)
70	-	NC	(Not used)
71	I	DQM1	Data input/output mask 1
72	-	VSS	Ground
73	-	NC	(Not used)
74	I/O	DQ8	SDRAM data 8
75	I	VDDQ	+3.3V
76	I/O	DQ9	SDRAM data 9
77	I/O	DQ10	SDRAM data 10
78	-	VSSQ	Ground
79	I/O	DQ11	SDRAM data 11
80	I/O	DQ12	SDRAM data 12
81	I	VDDQ	+3.3V
82	I/O	DQ13	SDRAM data 13
83	I/O	DQ14	SDRAM data 14
84	-	VSSQ	Ground
85	I/O	DQ15	SDRAM data 15
86	-	VSS	Ground

DVD MAIN III SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.



LINK TO VOLTAGE CHART

LSJB2091
DVD MAIN III SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

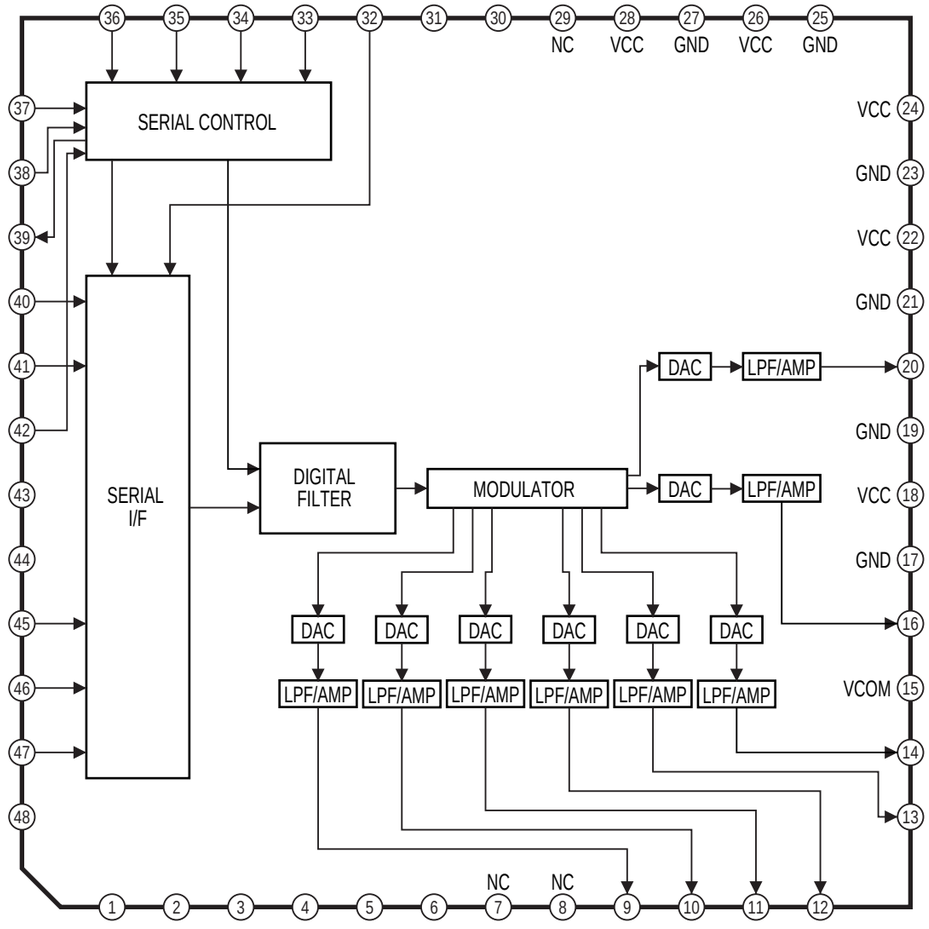
NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

IC8501 IC-DETAIL BLOCK DIAGRAM

IC8502 IC-DETAIL BLOCK DIAGRAM



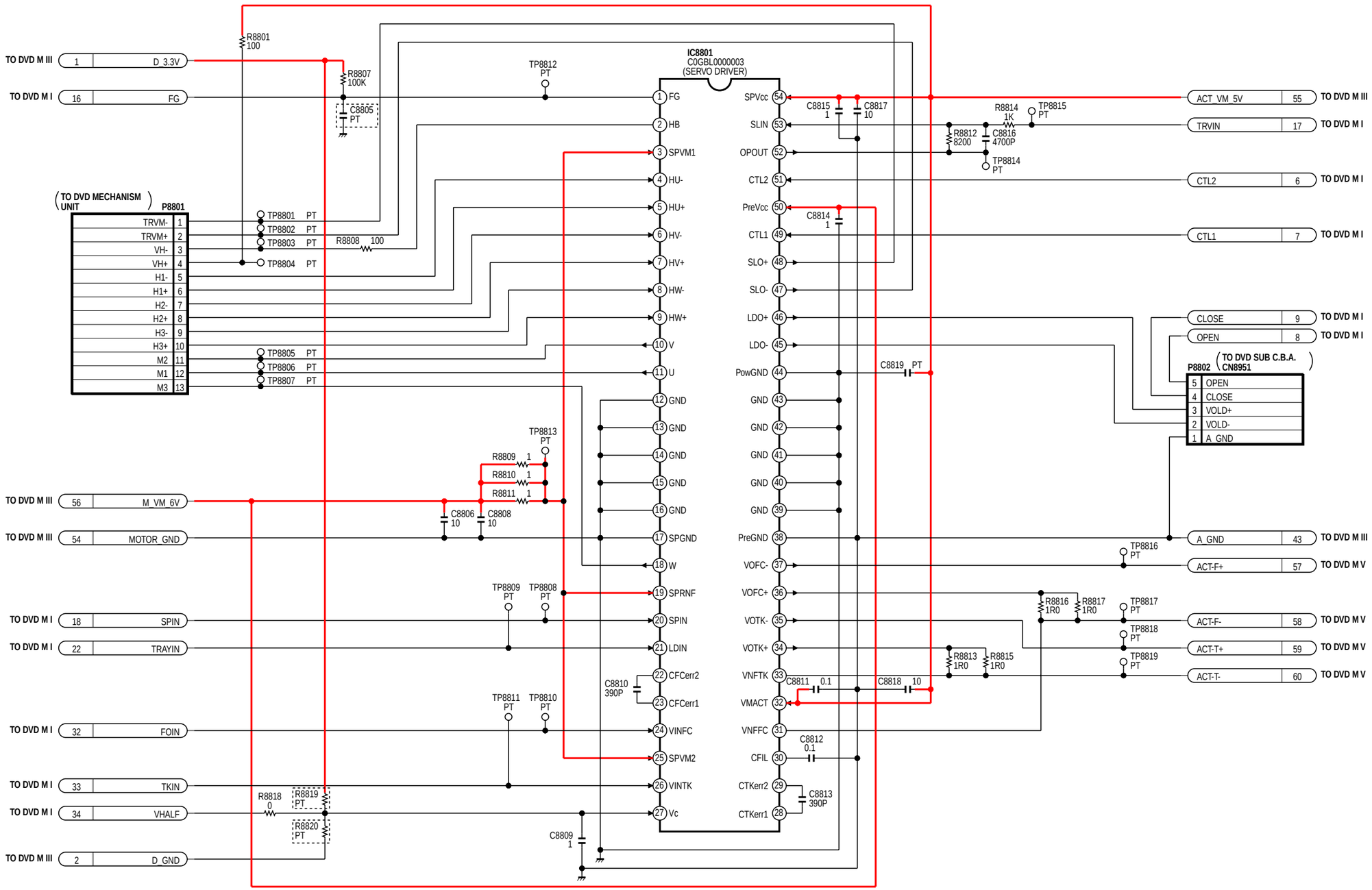
IC8501, IC8502 DETAIL BLOCK DIAGRAM
PV-20D53/PV-27D53

DVD MAIN IV SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

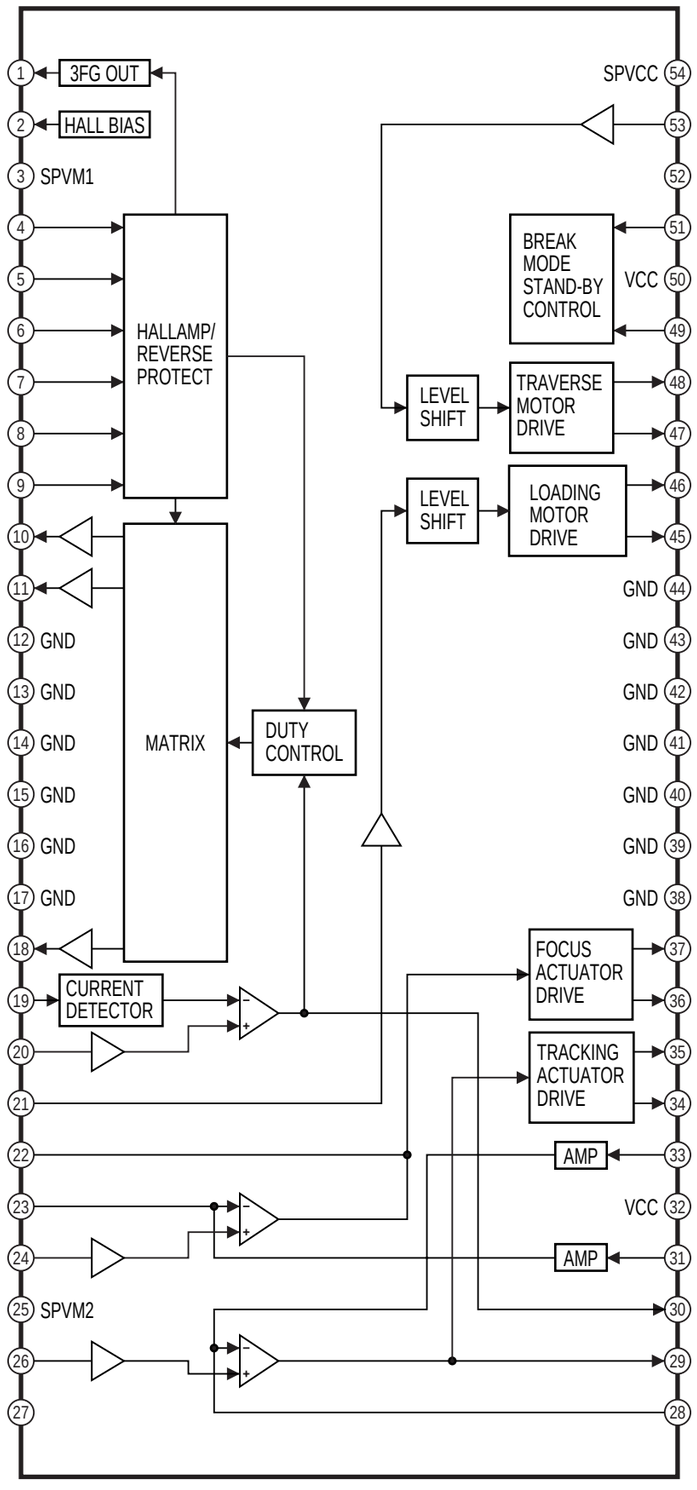
NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.



LINK TO VOLTAGE CHART

LSJB2091
DVD MAIN IV SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

IC8801 IC-DETAIL BLOCK DIAGRAM



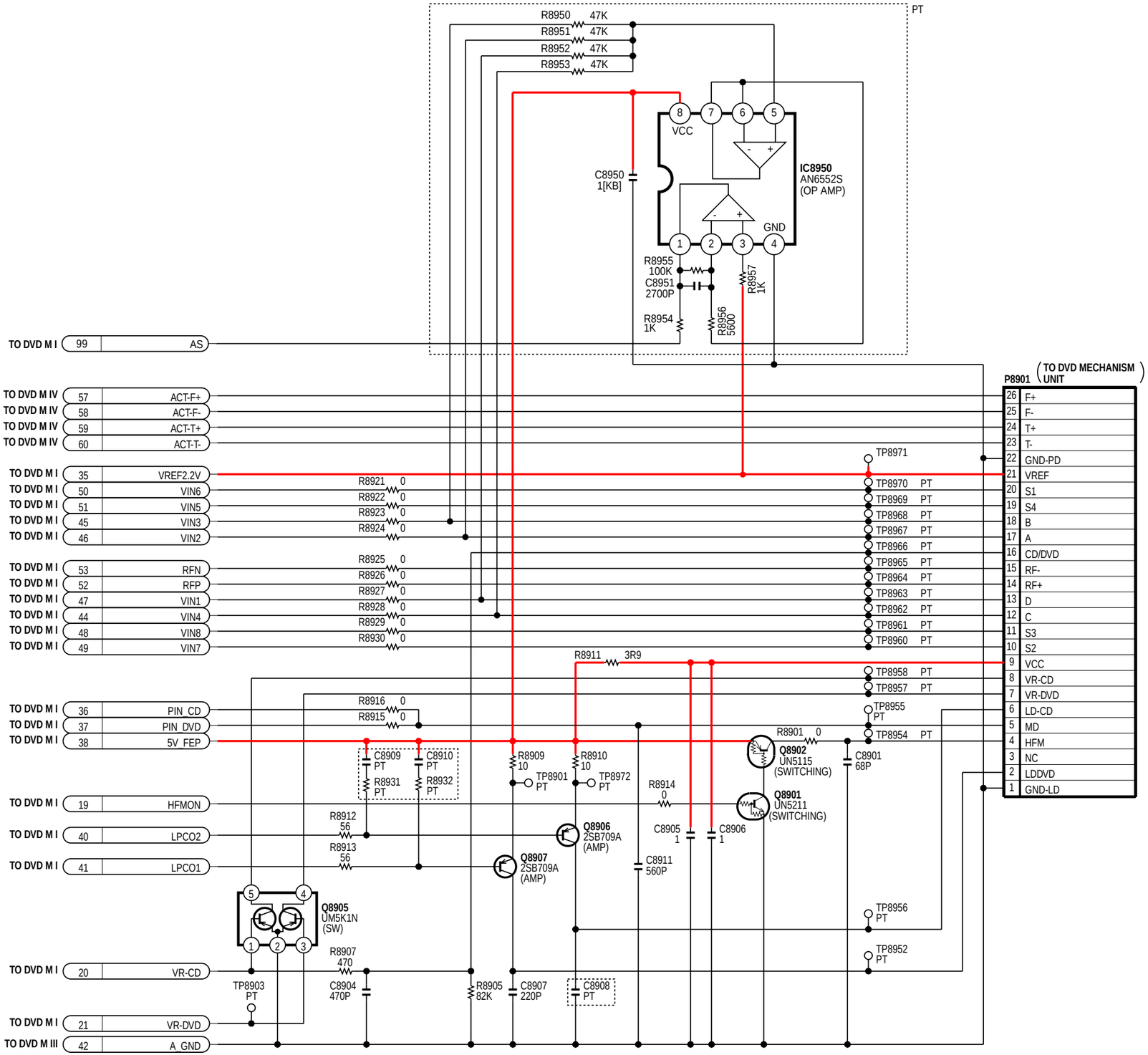
IC8801 DETAIL BLOCK DIAGRAM
PV-20D53/PV-27D53

DVD MAIN V SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.



LINK TO VOLTAGE CHART

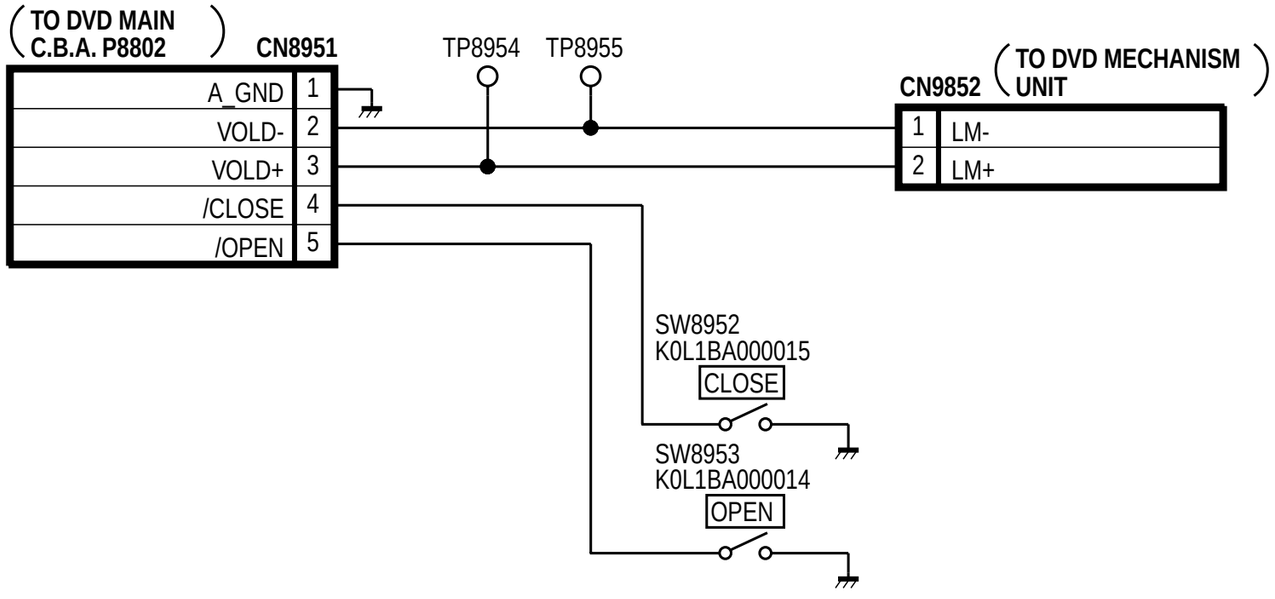
LSJB2091
DVD MAIN V SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

DVD SUB SCHEMATIC DIAGRAM

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.



LINK TO VOLTAGE CHART

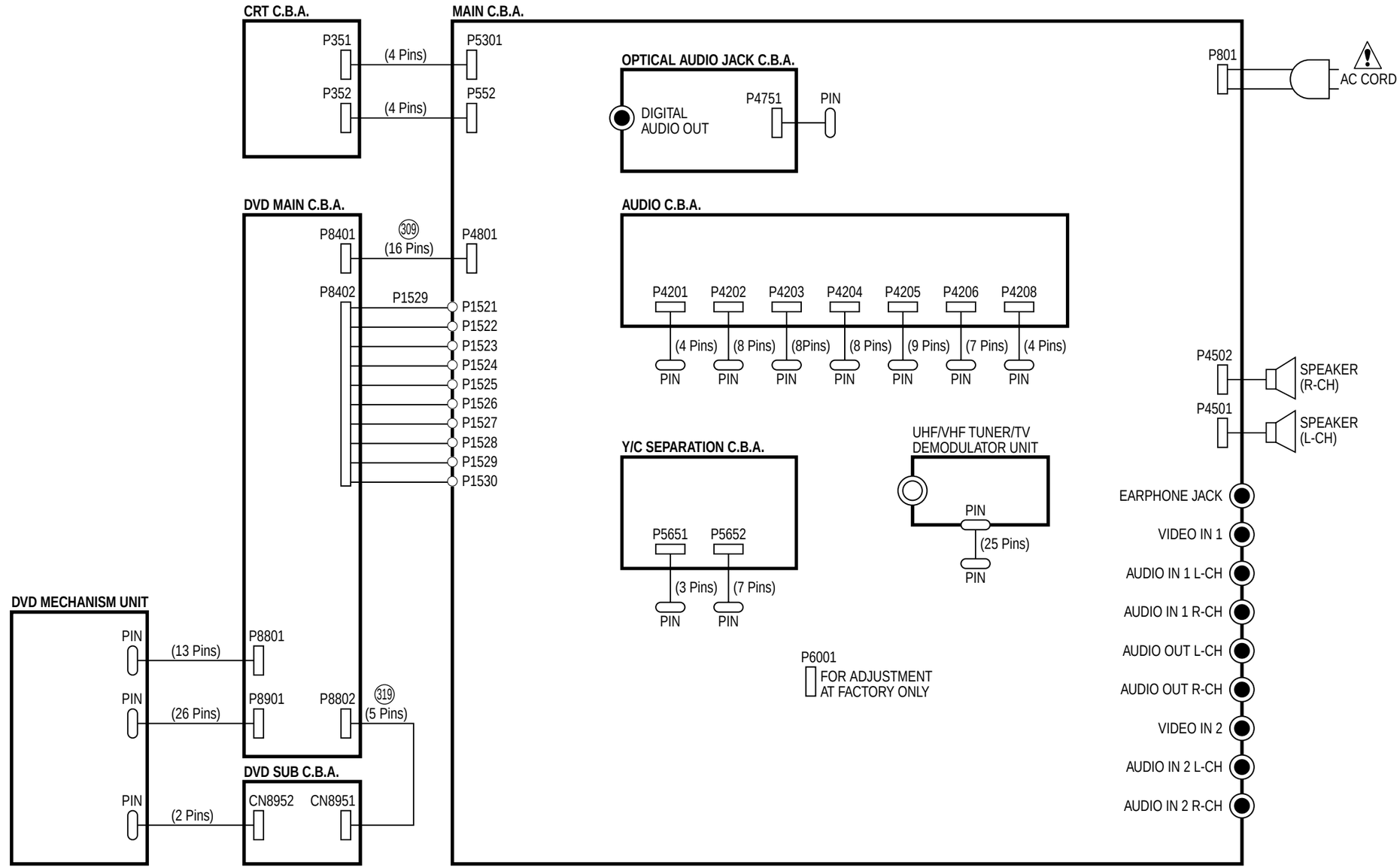
INTERCONNECTION SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts lis
Do not use the part number on this diagram.

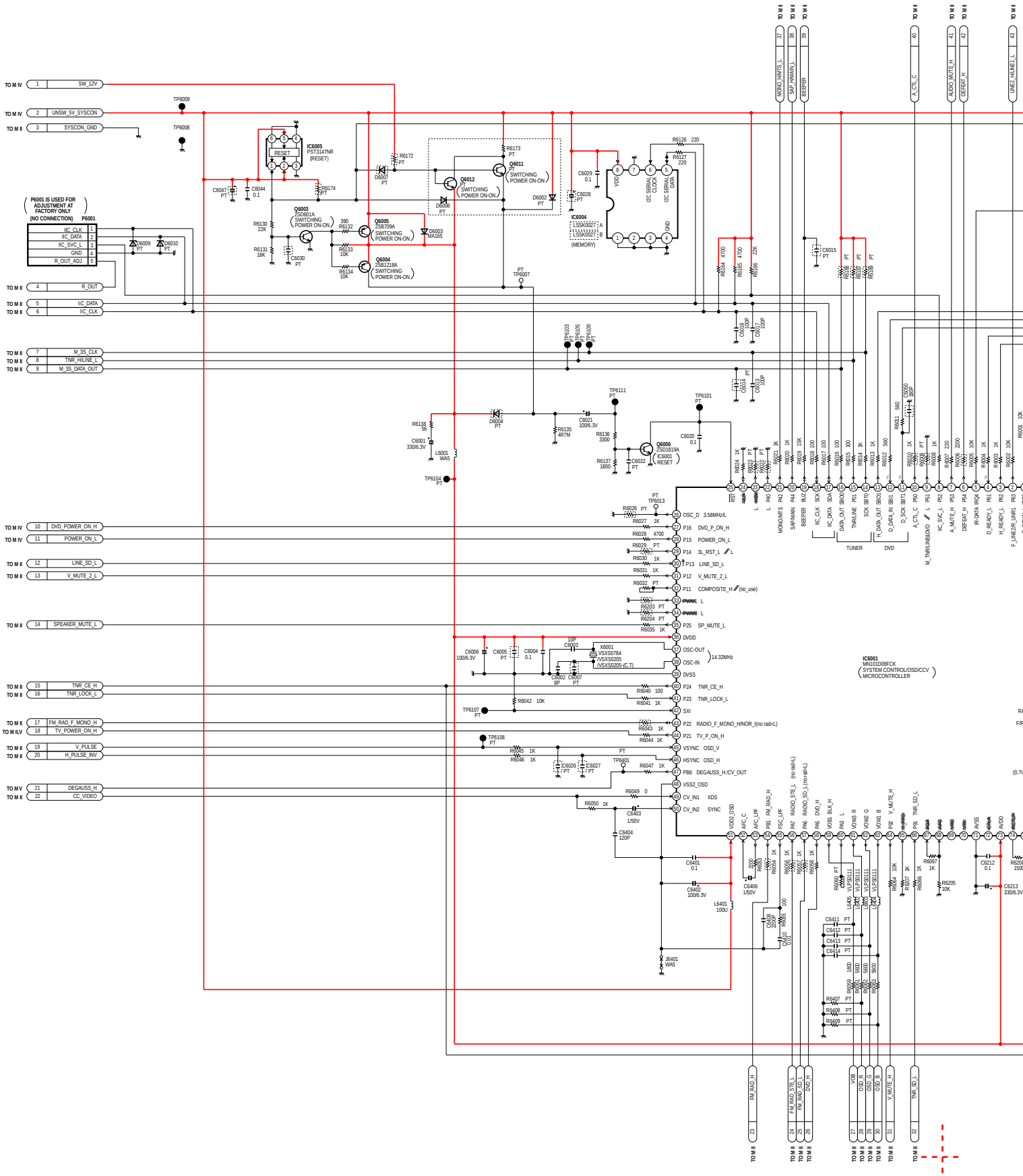
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE
SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,
USE ONLY THE SPECIFIED PARTS.



8.2. MAIN / OPTICAL AUDIO JACK SCHEMATIC DIAGRAMS

MAIN I SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCU
REFER TO BEGINNING OF SCHEMATIC



SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
ER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

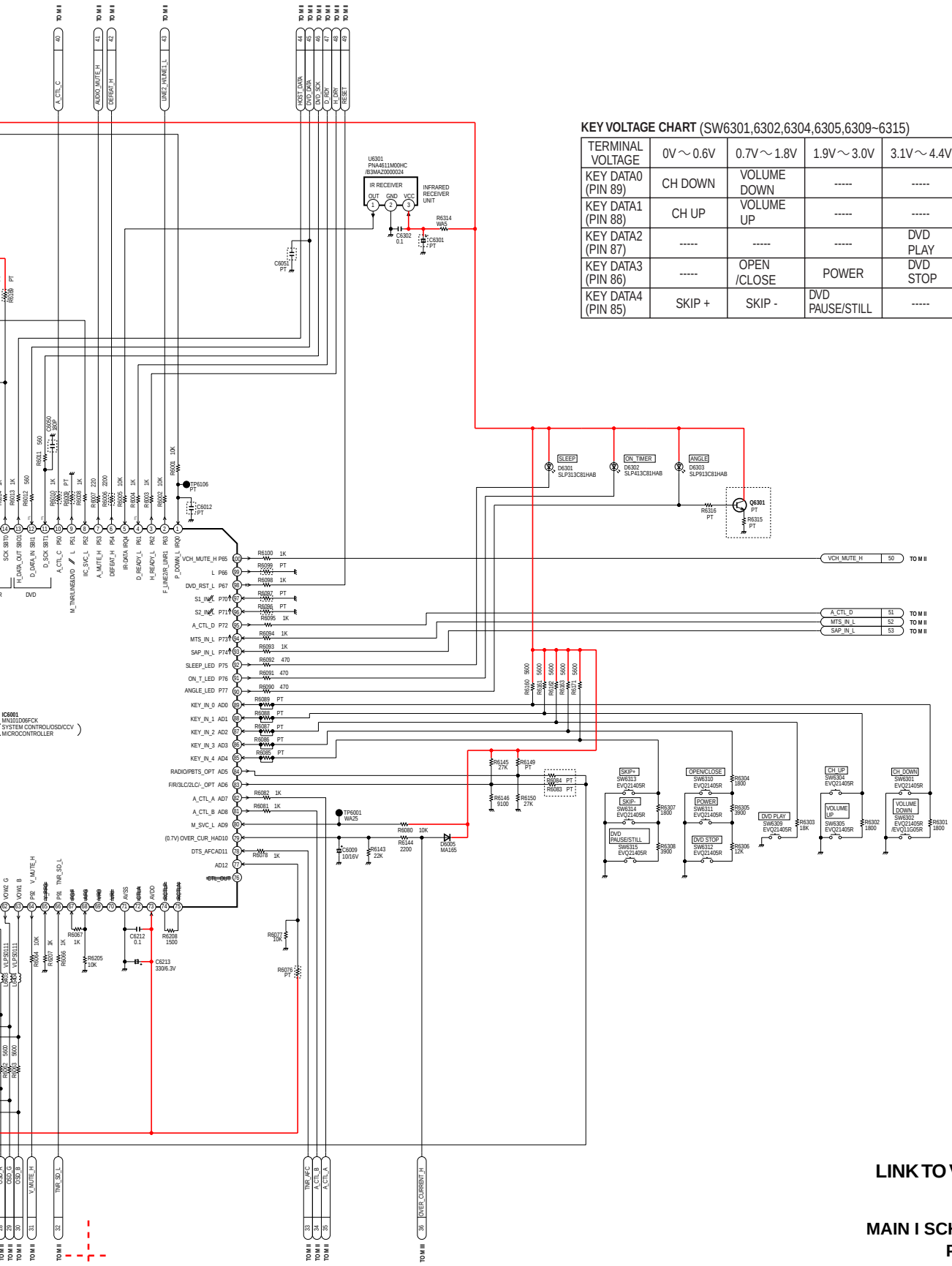
NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-20D53	A
PV-27D53	B
Not Used	PT

KEY VOLTAGE CHART (SW6301,6302,6304,6305,6309~6315)

TERMINAL VOLTAGE	0V～0.6V	0.7V～1.8V	1.9V～3.0V	3.1V～4.4V
KEY DATA0 (PIN 89)	CH DOWN	VOLUME DOWN	-----	-----
KEY DATA1 (PIN 88)	CH UP	VOLUME UP	-----	-----
KEY DATA2 (PIN 87)	-----	-----	-----	DVD PLAY
KEY DATA3 (PIN 86)	-----	OPEN /CLOSE	POWER	DVD STOP
KEY DATA4 (PIN 85)	SKIP +	SKIP -	DVD PAUSE/STILL	-----

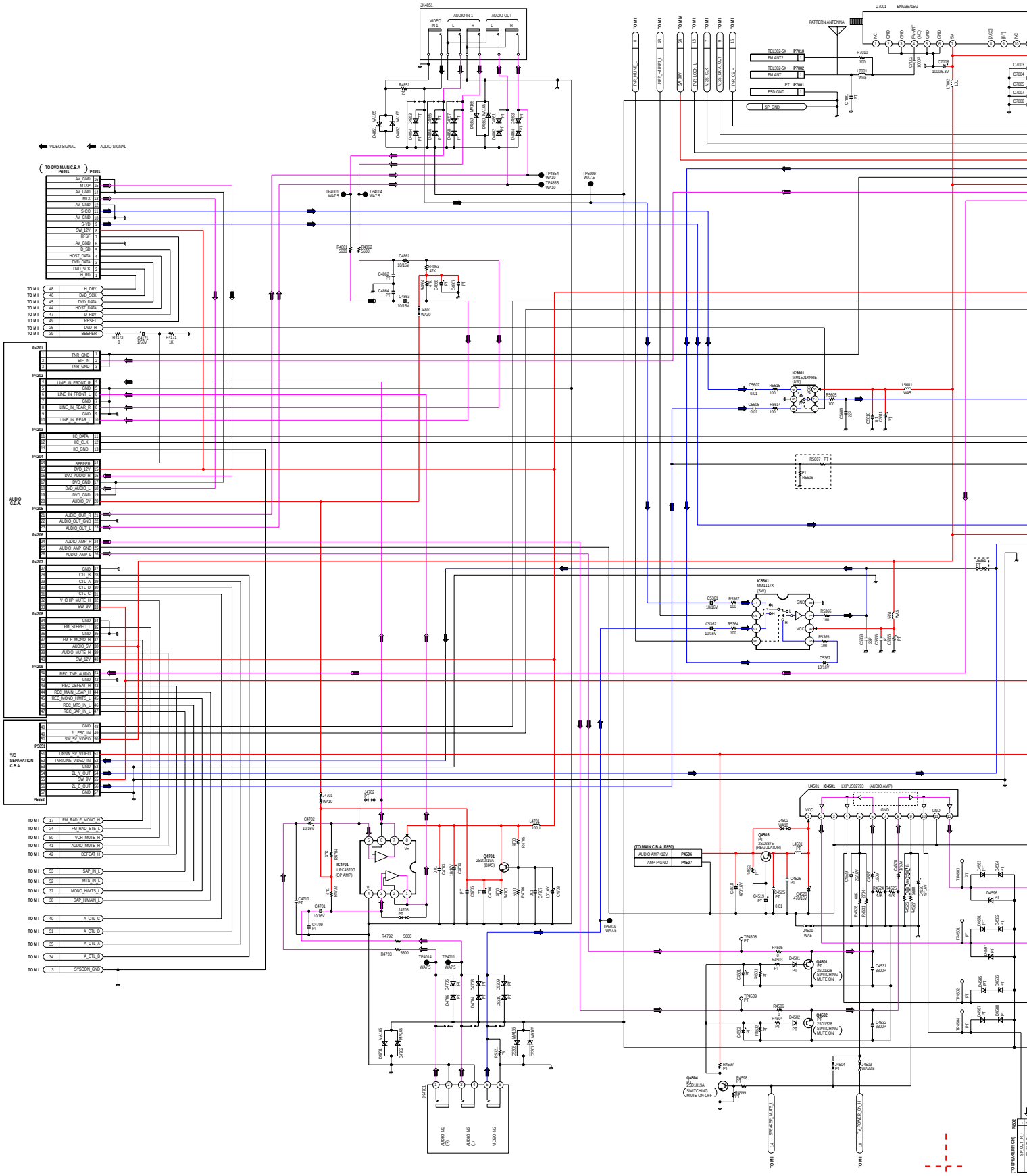


LINK TO VOLTAGE CHART

LSJB2084
MAIN I SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

MAIN II SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCU
REFER TO BEGINNING OF SCHEMATIC



SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
ER TO BEGINNING OF SCHEMATIC SECTION.

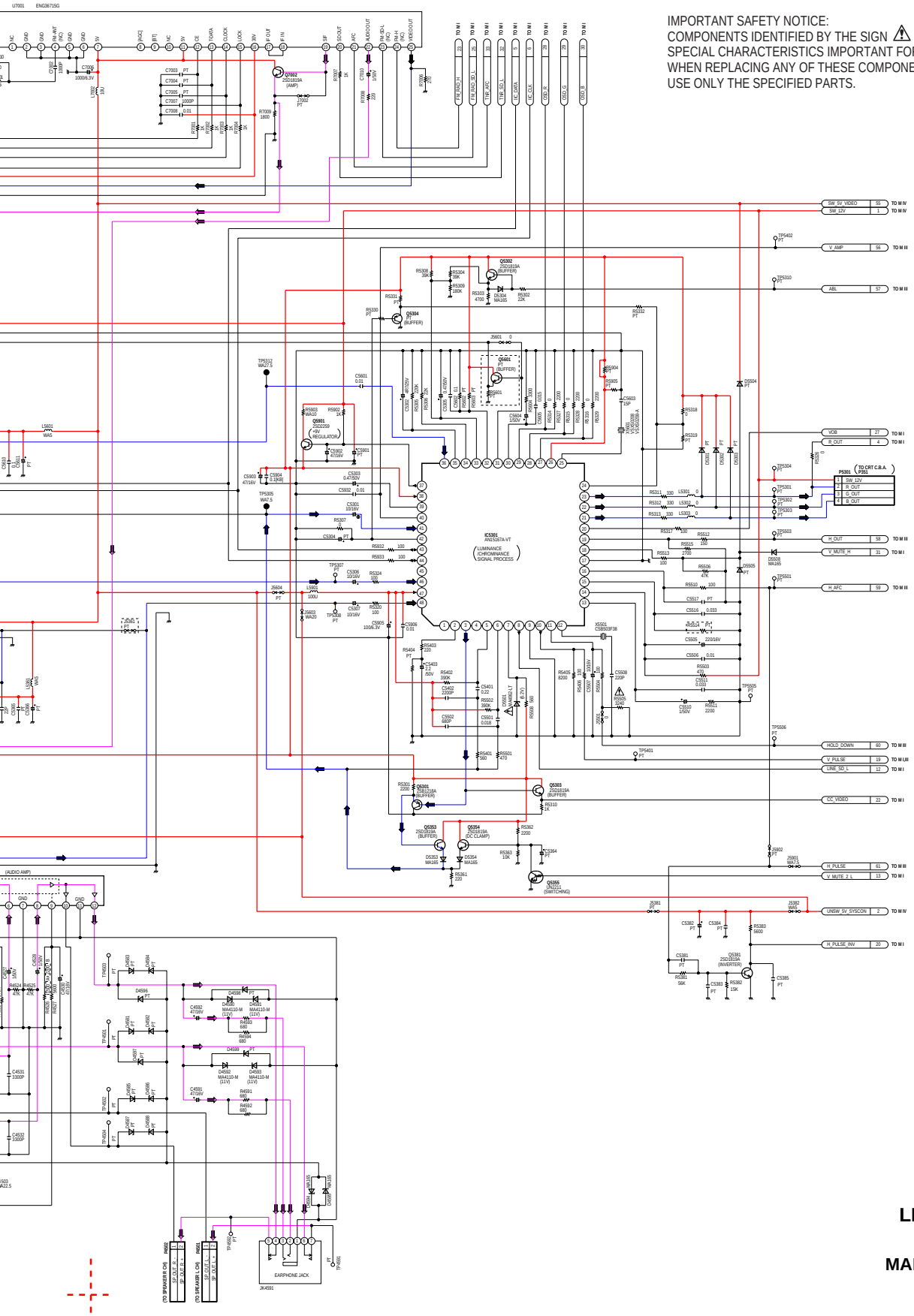
NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE
SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,
USE ONLY THE SPECIFIED PARTS.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-20D53	A
PV-27D53	B
Not Used	PT

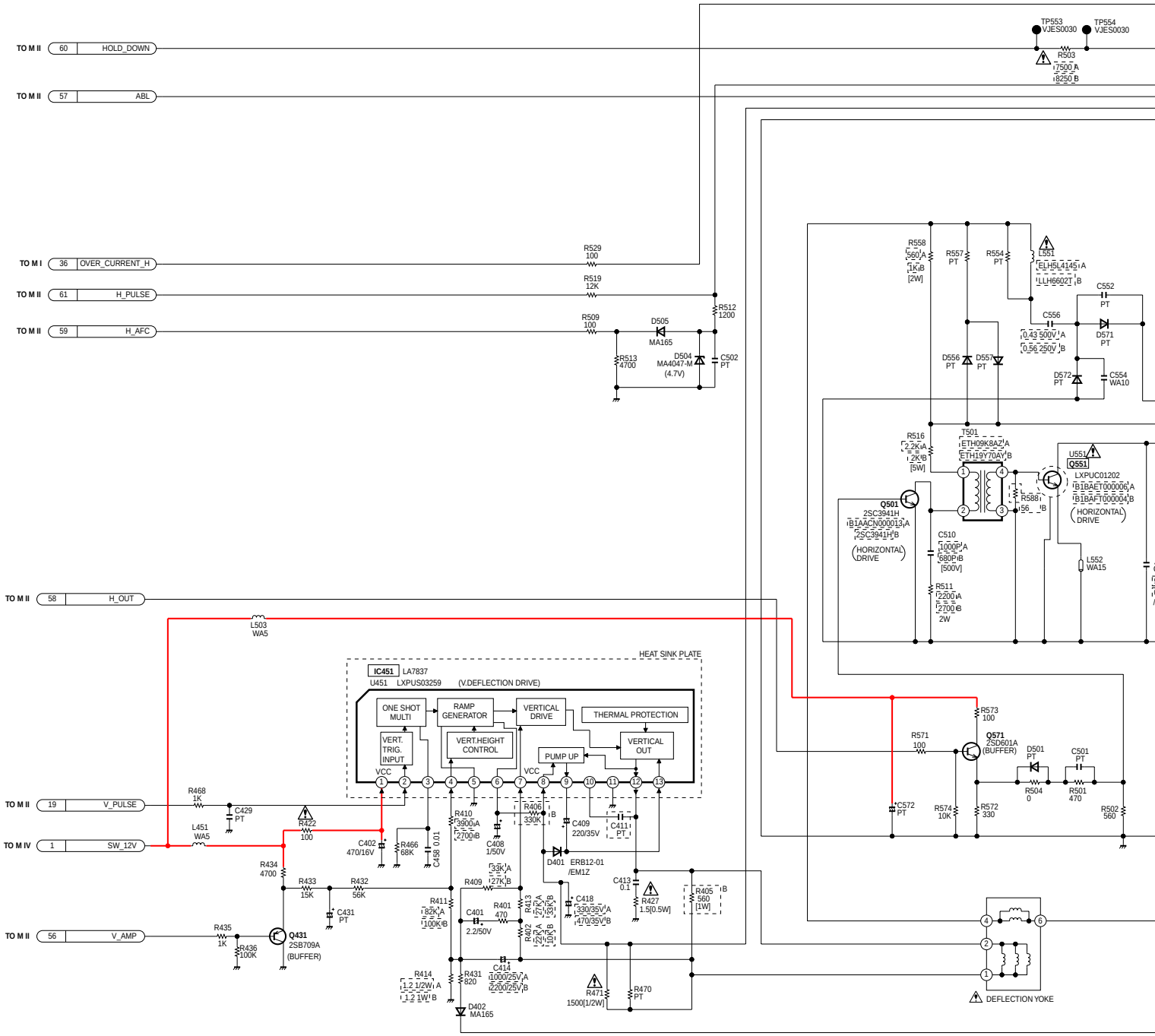


LINK TO VOLTAGE CHART

LSJB2084
MAIN II SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

MAIN III SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCU
REFER TO BEGINNING OF SCHEMATIC



SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
ER TO BEGINNING OF SCHEMATIC SECTION.

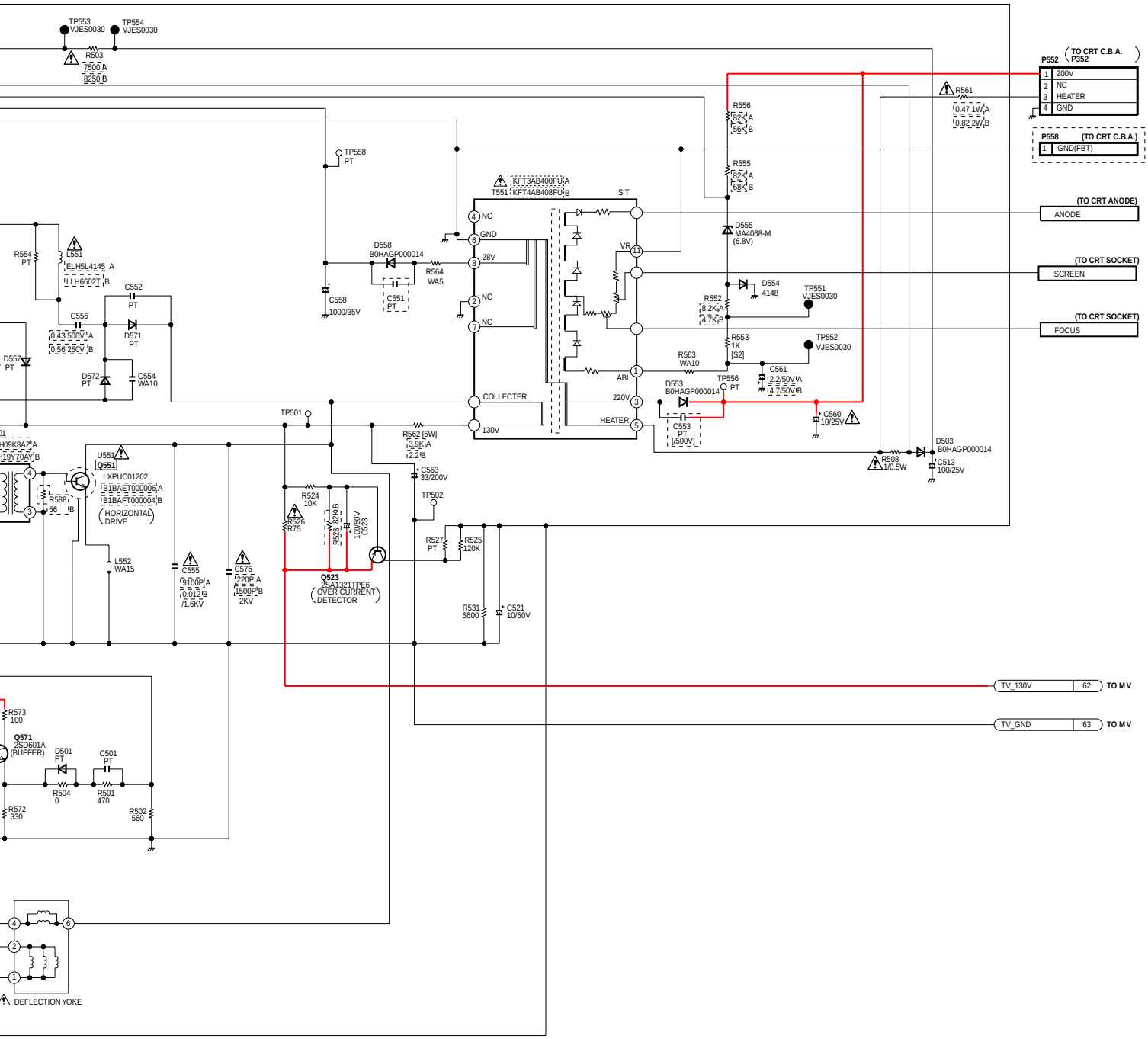
NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-20D53	A
PV-27D53	B
Not Used	PT



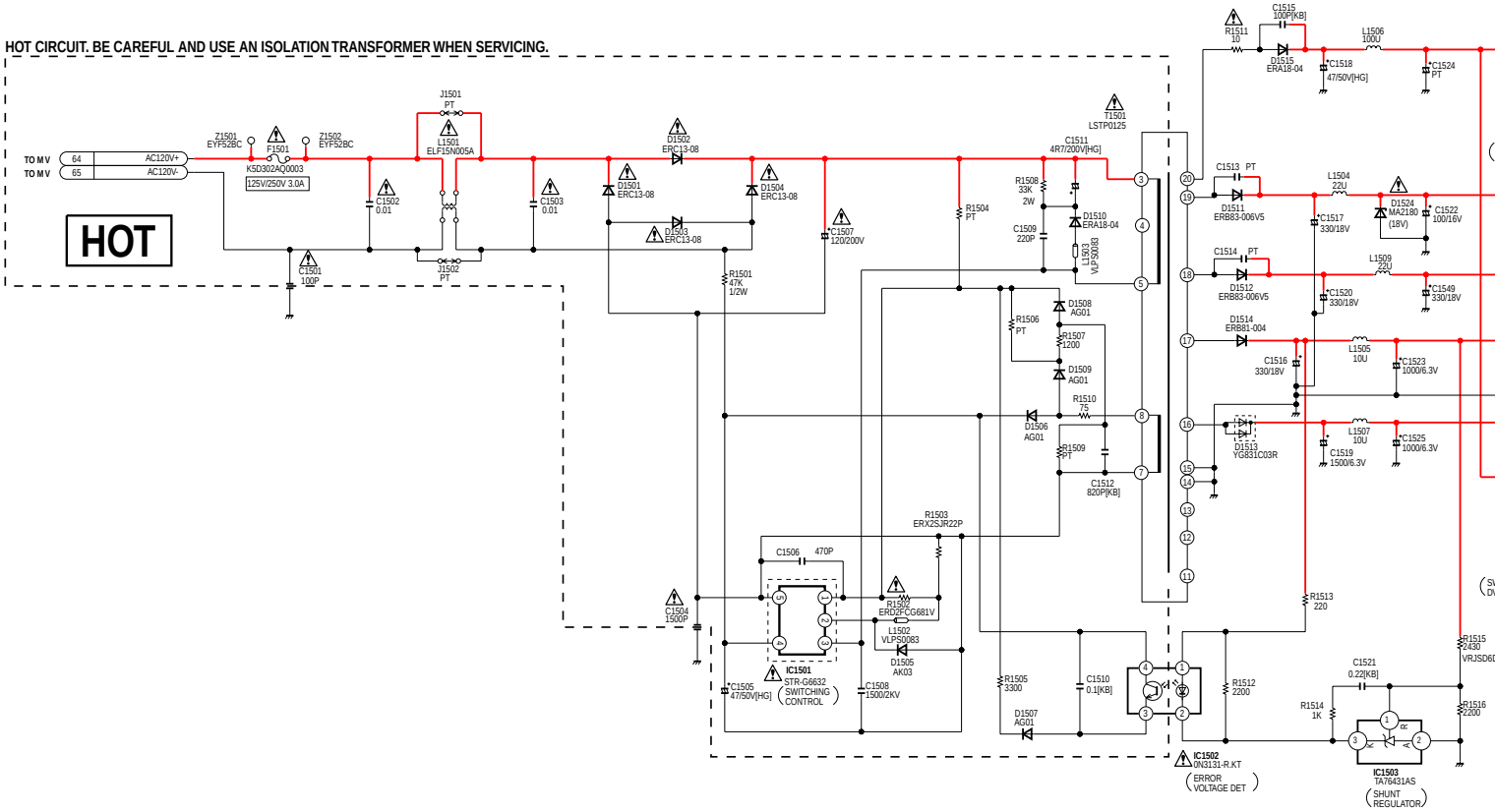
LINK TO VOLTAGE CHART

LSJB2084
MAIN III SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

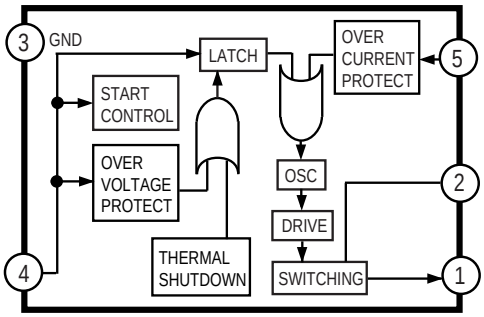
MAIN IV / OPTICAL AUDIO JACK SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCU
REFER TO BEGINNING OF SCHEMATIC

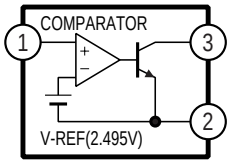
CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE 3A 125V/250V FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES
D' INCENDIE N' UTILISERQUE DES FUSIBLE DE MÉME
TYPE 3A 125V/250V



IC1501 SWITCHING CONTROL IC- DETAIL BLOCK DIAGRAM



IC1503 SHUNT REGULATOR IC- DETAIL BLOCK DIAGRAM



SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
ER TO BEGINNING OF SCHEMATIC SECTION.

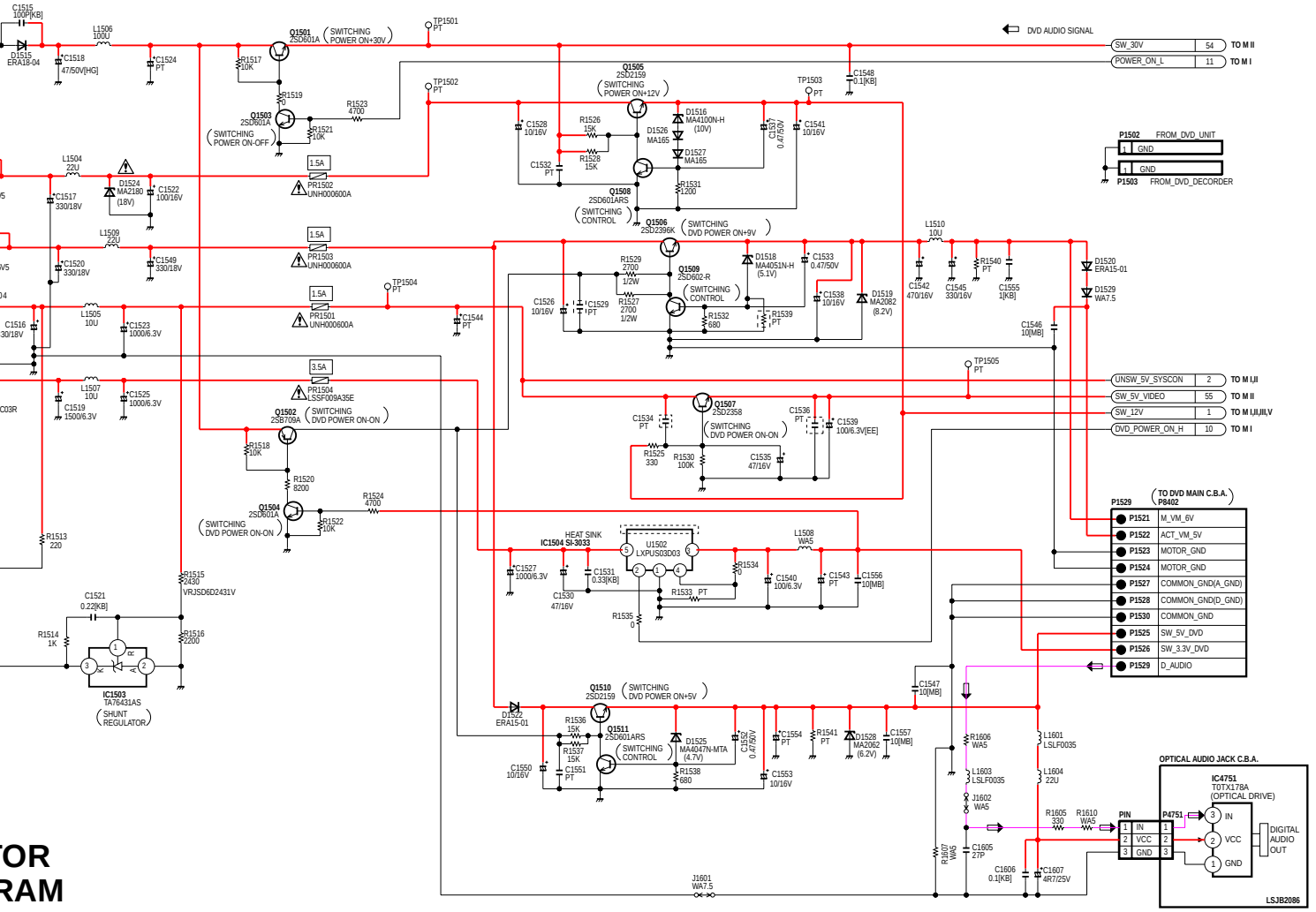
NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-20D53	A
PV-27D53	B
Not Used	PT

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.



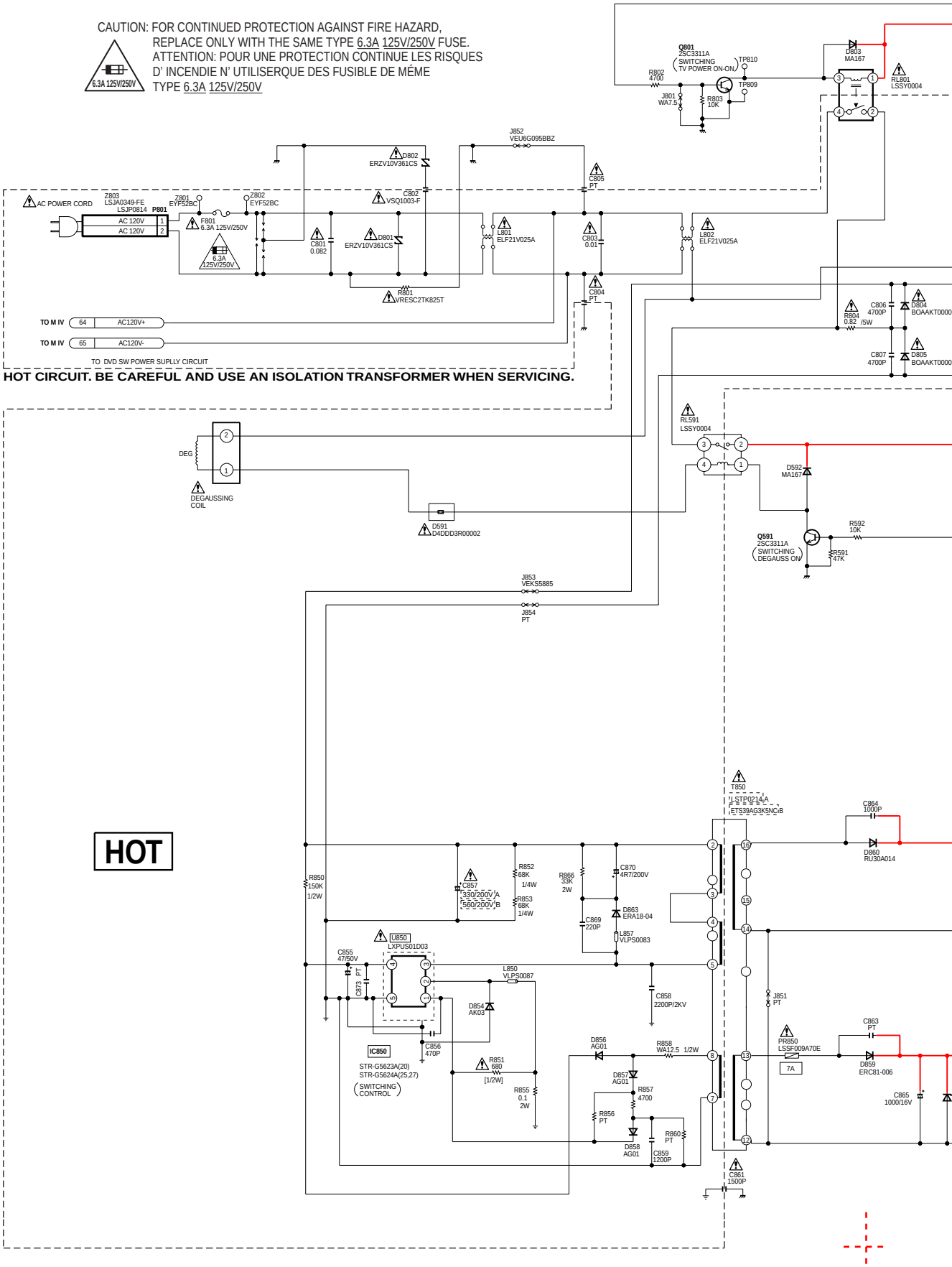
LINK TO VOLTAGE CHART

LSJB2084/LSJB2086
MAIN IV / OPTICAL AUDIO JACK SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

MAIN V SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCU
REFER TO BEGINNING OF SCHEMATIC

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE 6.3A 125V/250V FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES
D' INCENDIE N' UTILISERQUE DES FUSIBLE DE MÉME
TYPE 6.3A 125V/250V



SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
ER TO BEGINNING OF SCHEMATIC SECTION.

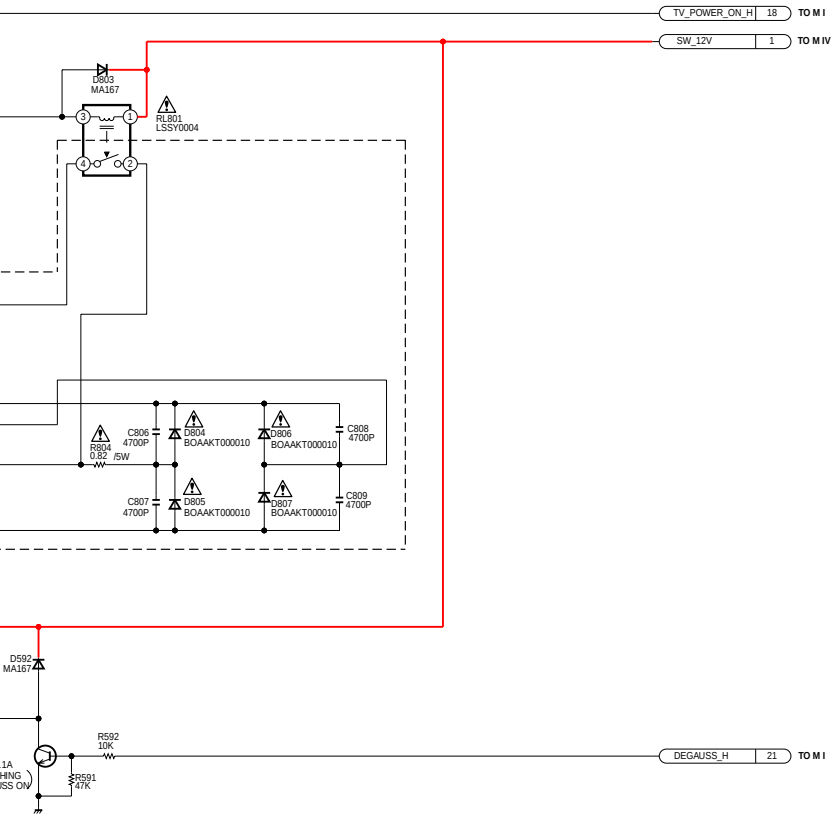
NOTE:
PARTS MARKED "PT" ARE NOT USED.

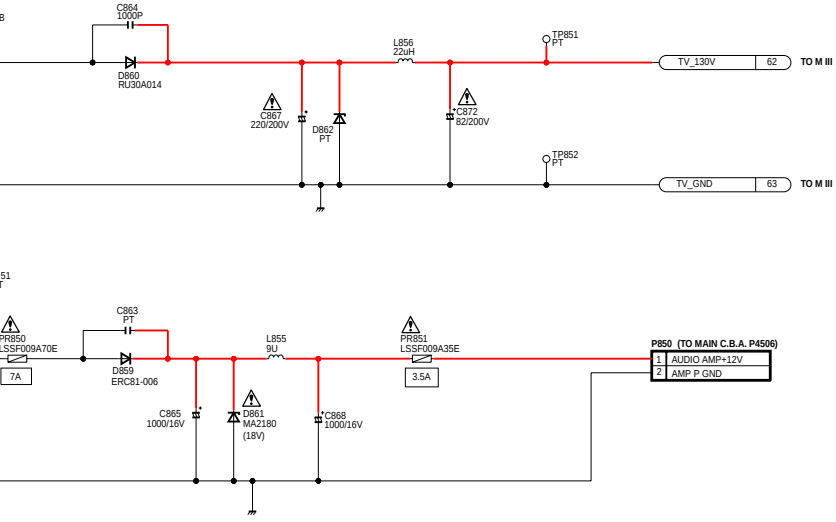
NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

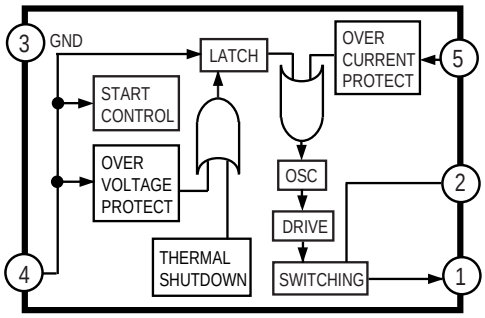
MODEL	MARK
PV-20D53	A
PV-27D53	B
Not Used	PT

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.





IC850 SWITCHING CONTROL IC- DETAIL BLOCK DIAGRAM



LINK TO VOLTAGE CHART

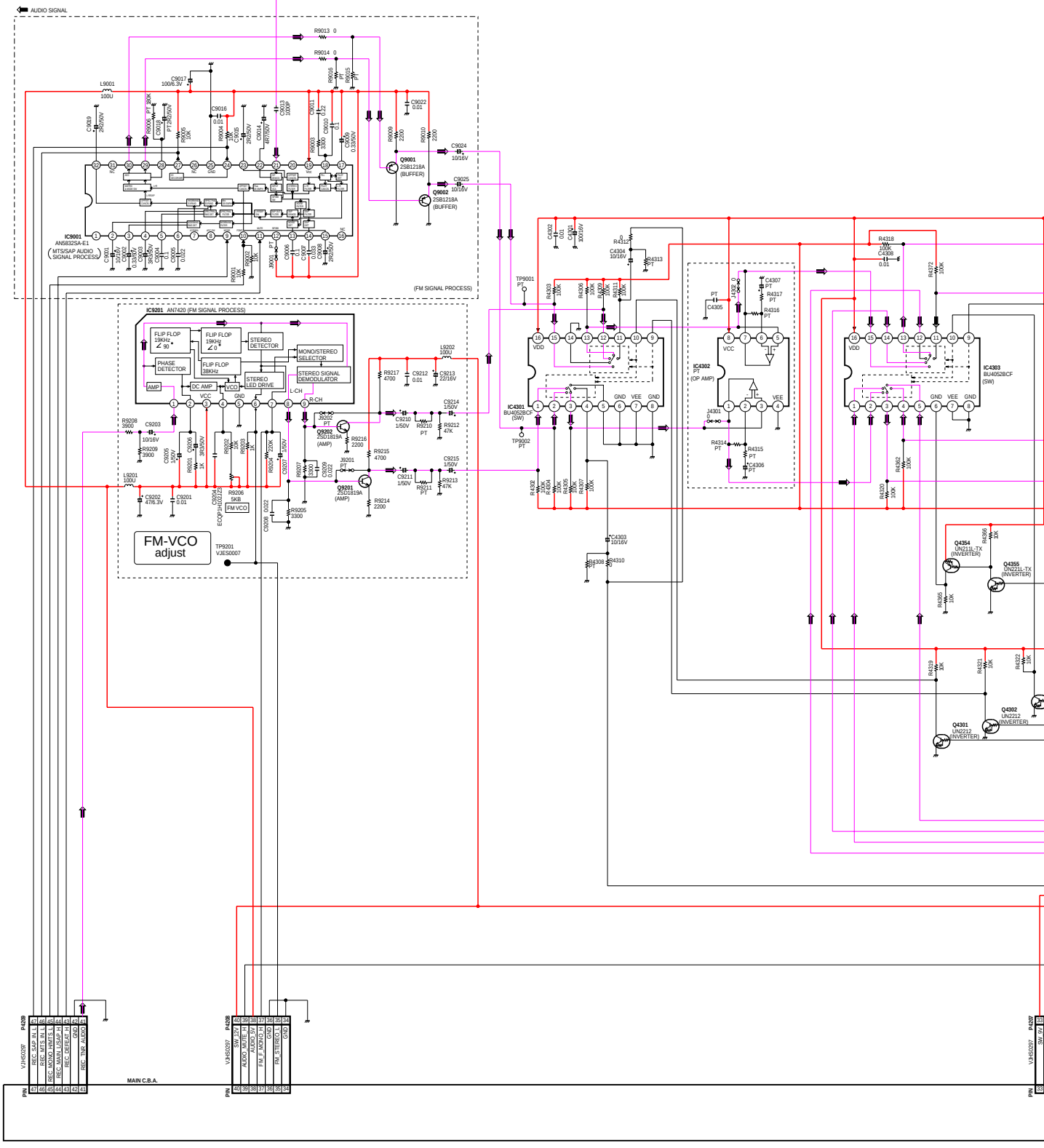
LSJB2084
MAIN V SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

8.3. AUDIO SCHEMATIC DIAGRAM

AUDIO SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

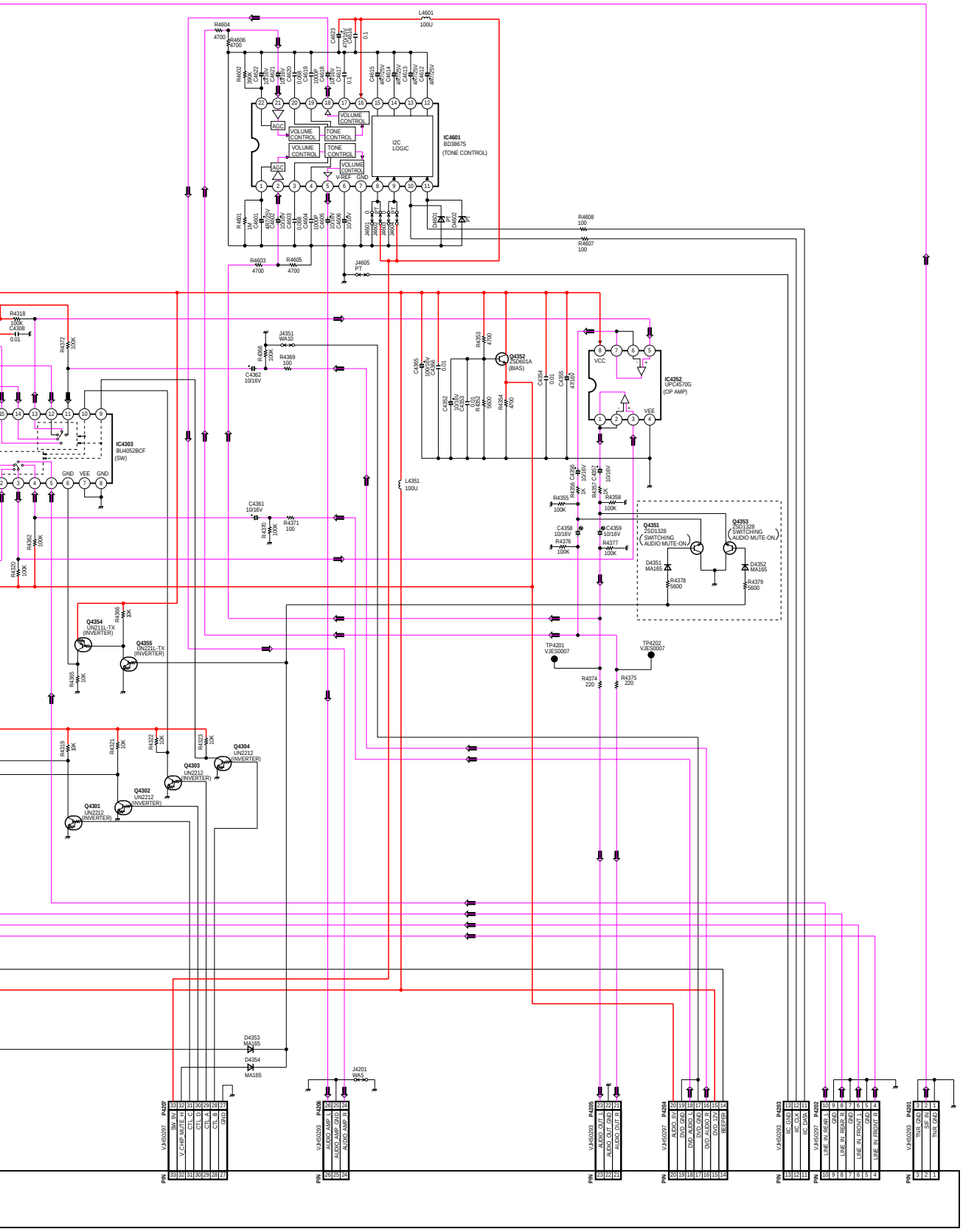
NOTE:
PARTS MARKED "!



LINK TO VOLTAGE CHART

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.



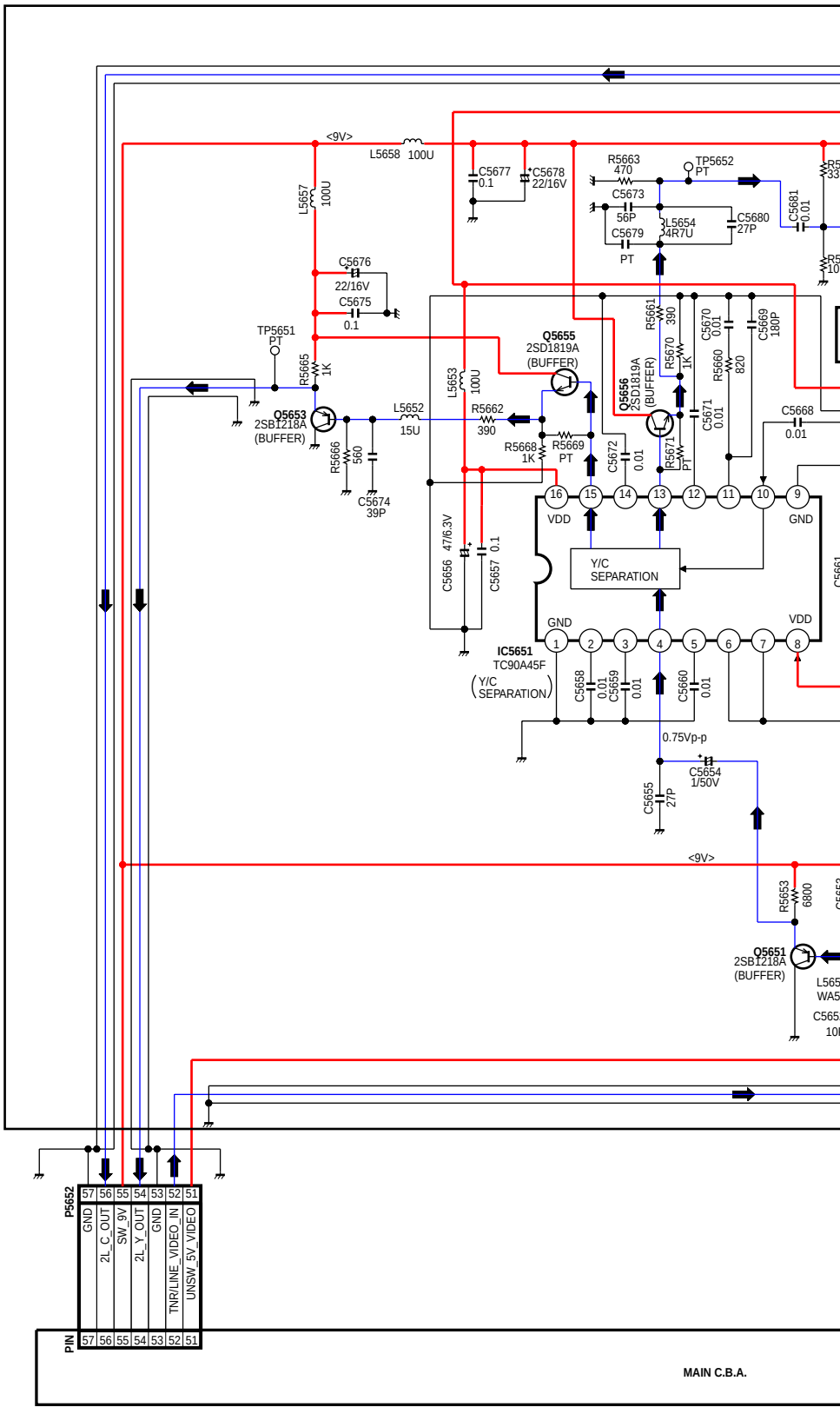
LSJB2120
AUDIO SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

8.4. Y/C SEPARATION SCHEMATIC DIAGRAM

Y/C SEPARATION SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

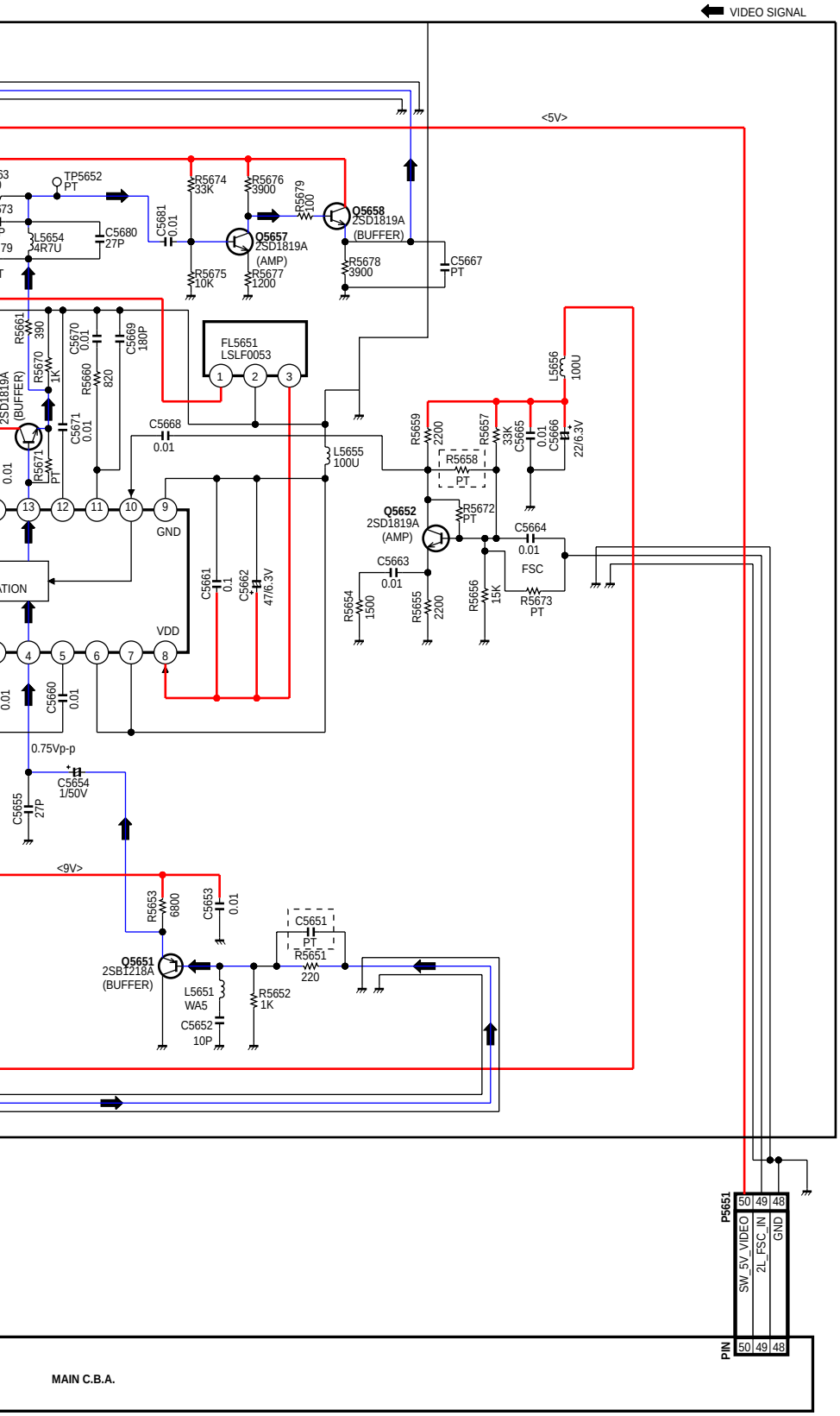
NOTE:
PARTS MARKED "



LINK TO VOLTAGE CHART

NOTE:
PARTS MARKED "PT" ARE NOT USED.

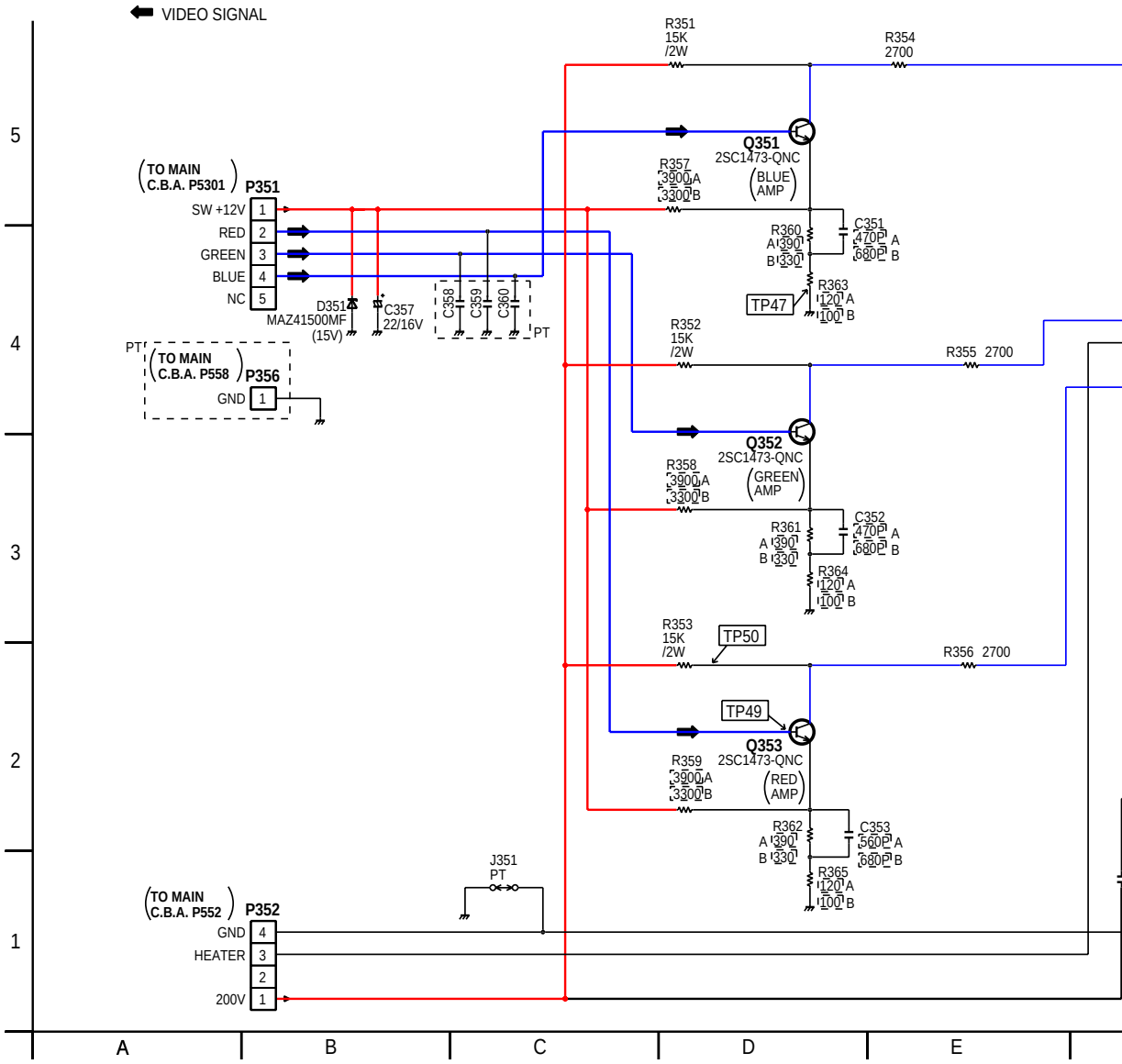
NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.



LSJB2119
Y/C SEPARATION SCHEMATIC
PV-20D53/PV-27D53

CRT SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCU
REFER TO BEGINNING OF SCHEMATIC



SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
ER TO BEGINNING OF SCHEMATIC SECTION.

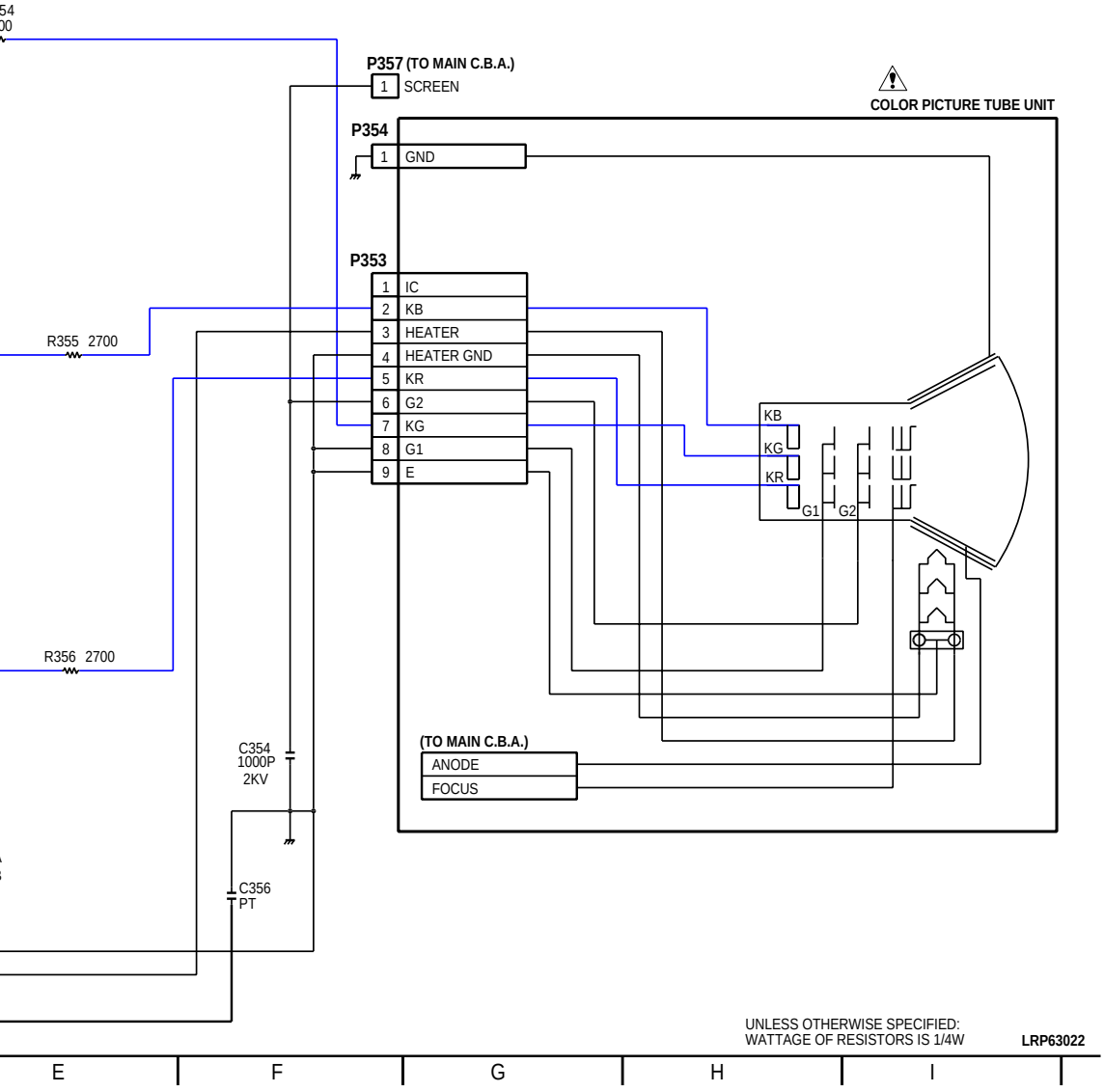
NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE
SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,
USE ONLY THE SPECIFIED PARTS.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-20D53	A
PV-27D53	B
Not Used	PT



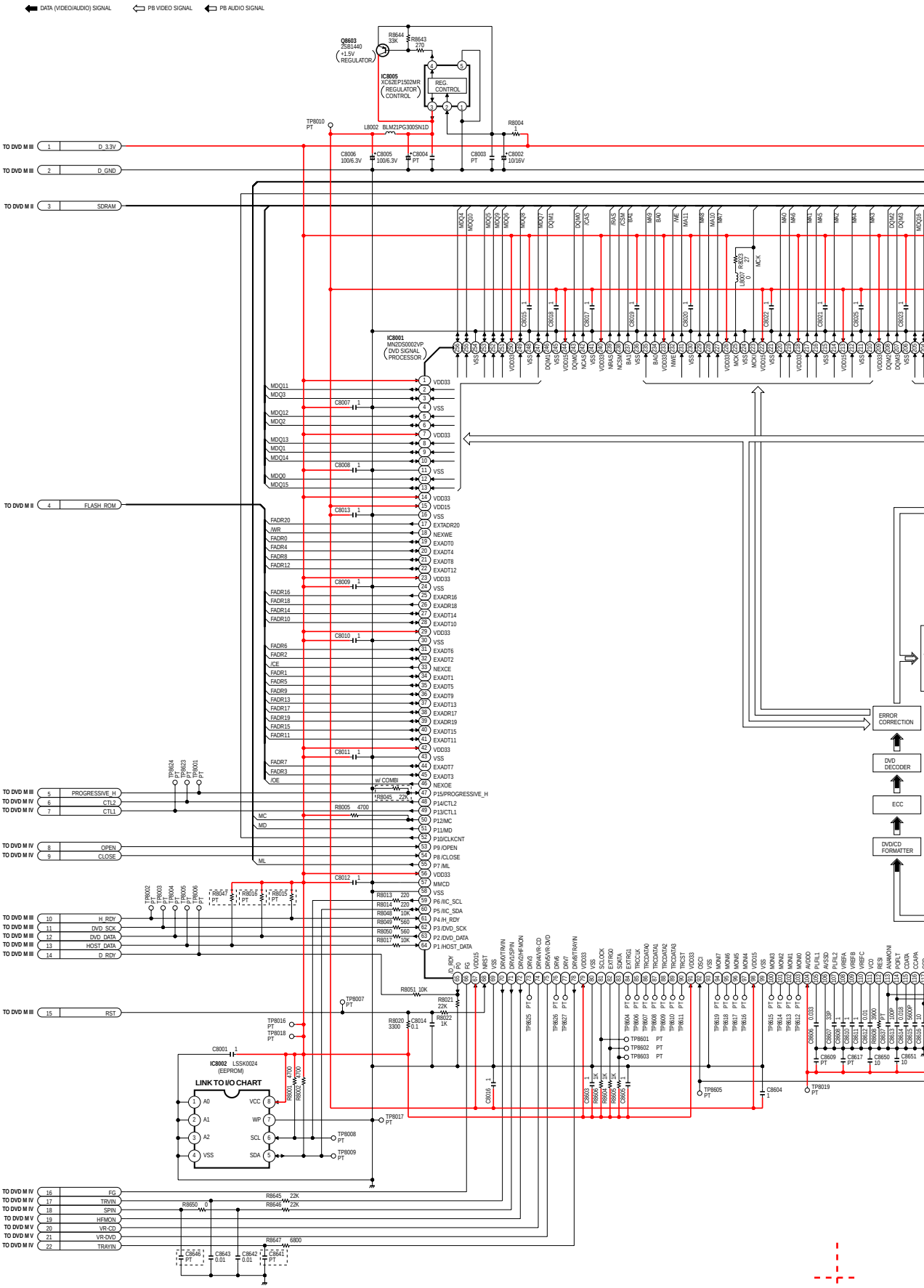
LINK TO VOLTAGE CHART

LRP63022
CRT SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

8.6. DVD MAIN SCHEMATIC DIAGRAMS

DVD MAIN I SCHEMATIC DIAGRAM

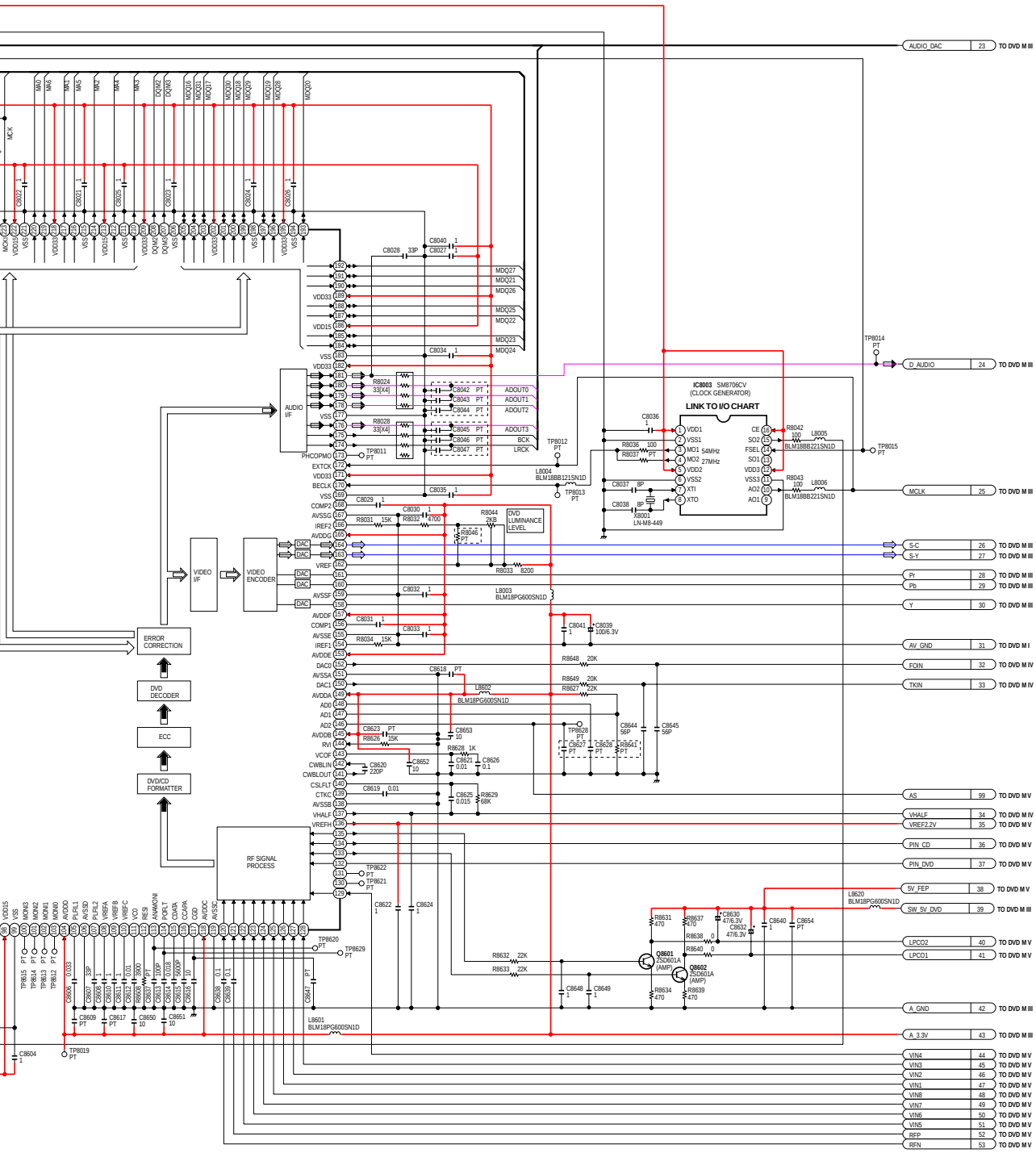
NOTE:
PARTS MARKED "PT" ARE NOT USED.


DATA (VIDEO/AUDIO) SIGNAL
PB VIDEO SIGNAL
PB AUDIO SIGNAL
Q8603 2SB1440 +1.5V REGULATOR
IC8005 XC62EP1502MR REGULATOR CONTROL
REG. CONTROL
L8002 BLM21PG300SN1D
IC8001 MN2DS0002VP DVD SIGNAL PROCESSOR
IC8002 LSSK0024 (EEPROM)
LINK TO I/O CHART
TO DVD M III D_3.3V
TO DVD M III D_GND
TO DVD M II SDRAM
TO DVD M II FLASH_ROM
TO DVD M III PROGRESSIVE_H
TO DVD M IV CTL2
TO DVD M IV CTL1
TO DVD M IV OPEN
TO DVD M IV CLOSE
TO DVD M III H_RDY
TO DVD M III DVD_SCK
TO DVD M III DVD_DATA
TO DVD M III HOST_DATA
TO DVD M III D_RDY
TO DVD M III RST
TO DVD M IV FG
TO DVD M IV TRVIN
TO DVD M IV SPIN
TO DVD M V HFMON
TO DVD M V VR-CD
TO DVD M V VR-DVD
TO DVD M IV TRAYIN
ERROR CORRECTION
DVD DECODER
ECC
DVD/CD FORMATTER

RKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

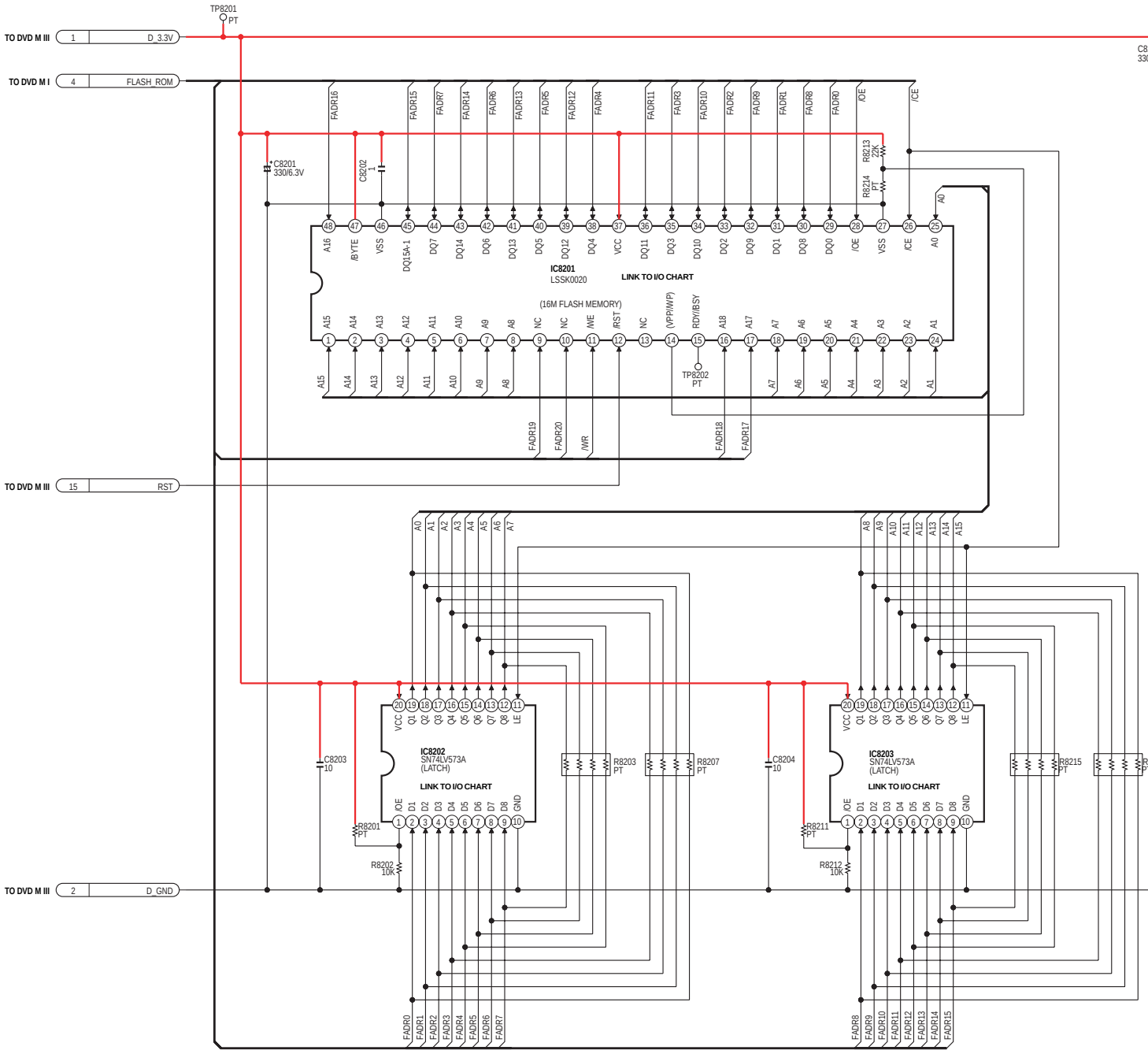
NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.



LINK TO VOLTAGE CHART

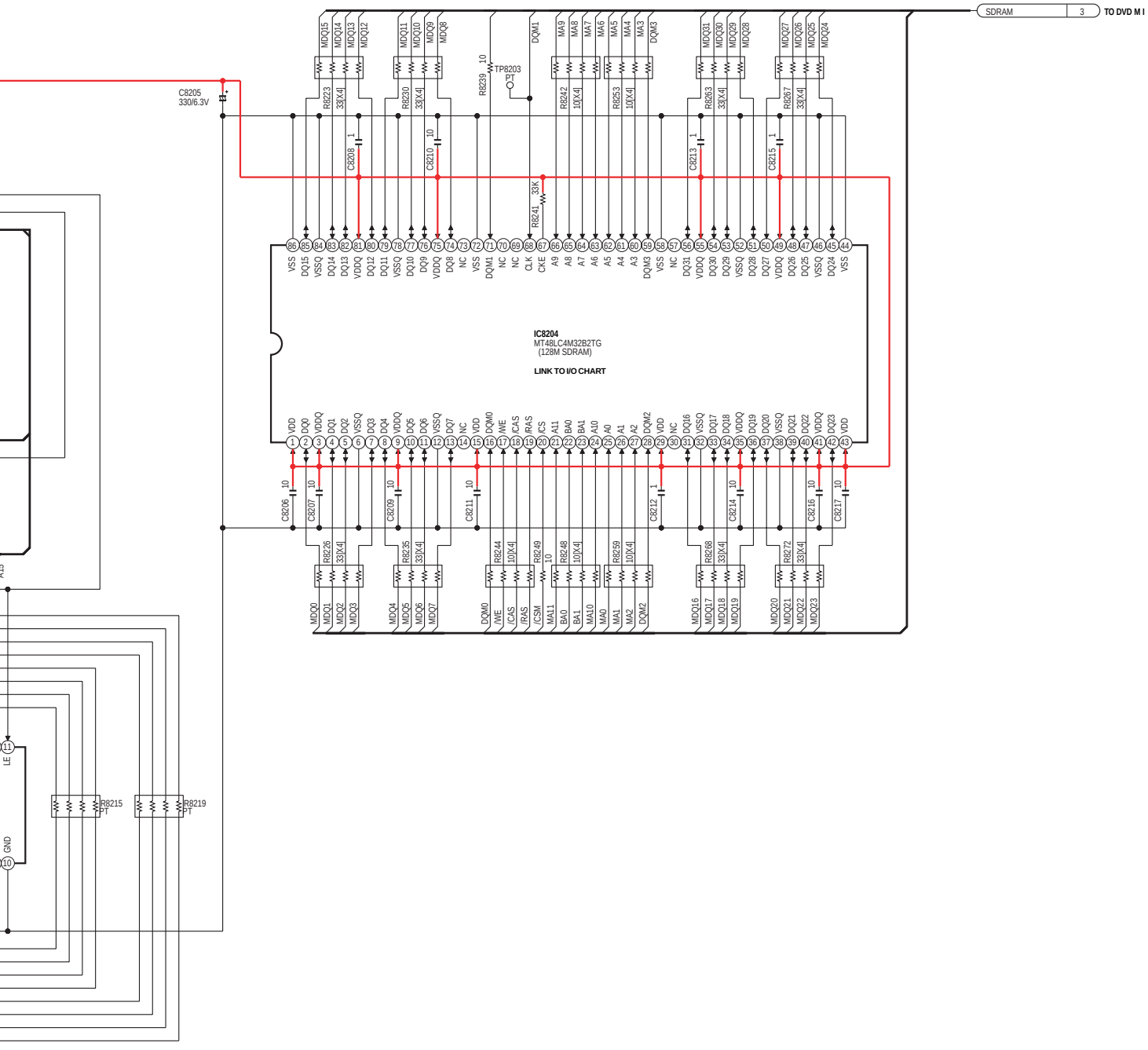
LSJB2091
DVD MAIN I SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

DVD MAIN II SCHEMATIC DIAGRAM



NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

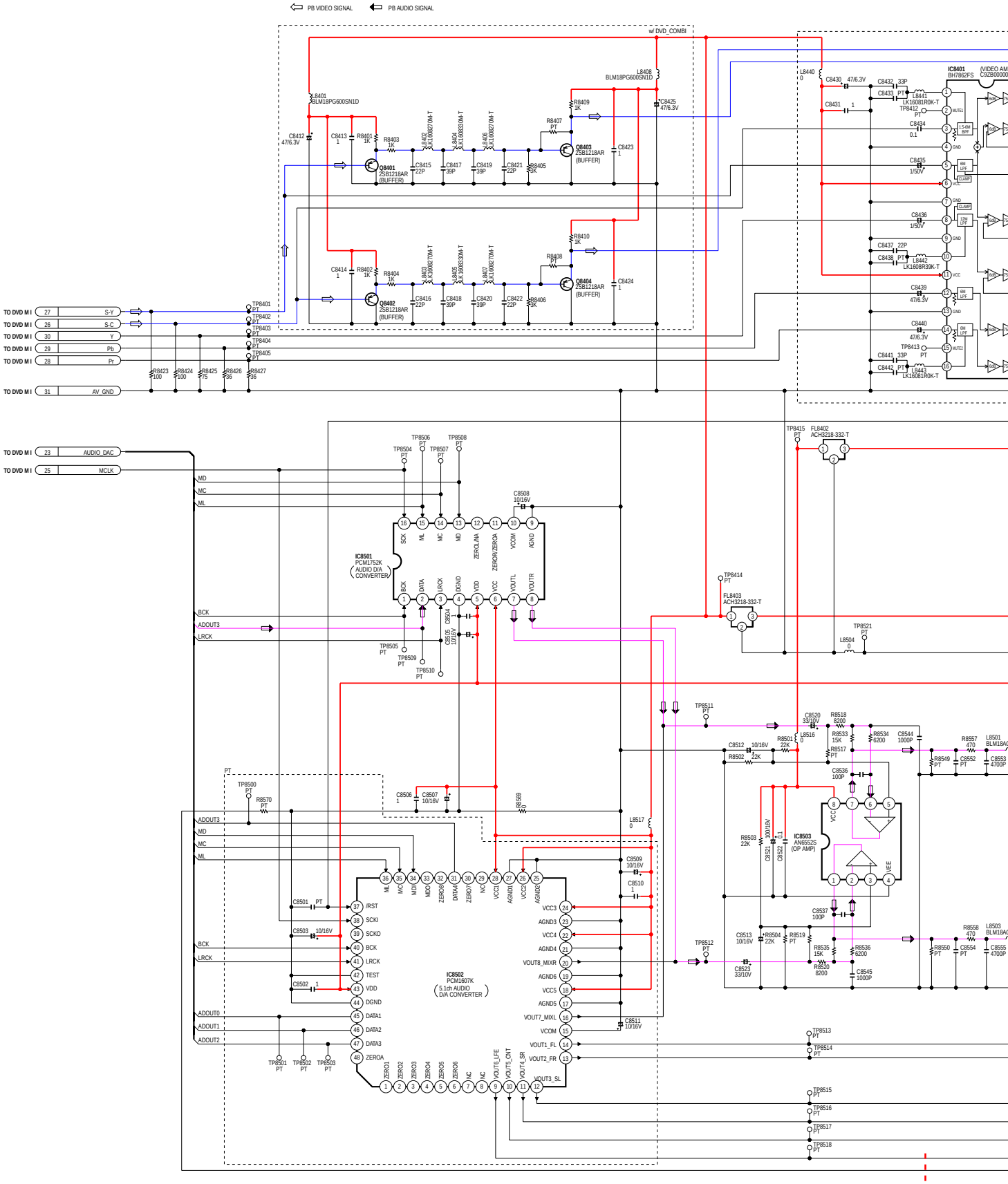


LINK TO VOLTAGE CHART

LSJB2091
DVD MAIN II SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

DVD MAIN III SCHEMATIC DIAGRAM

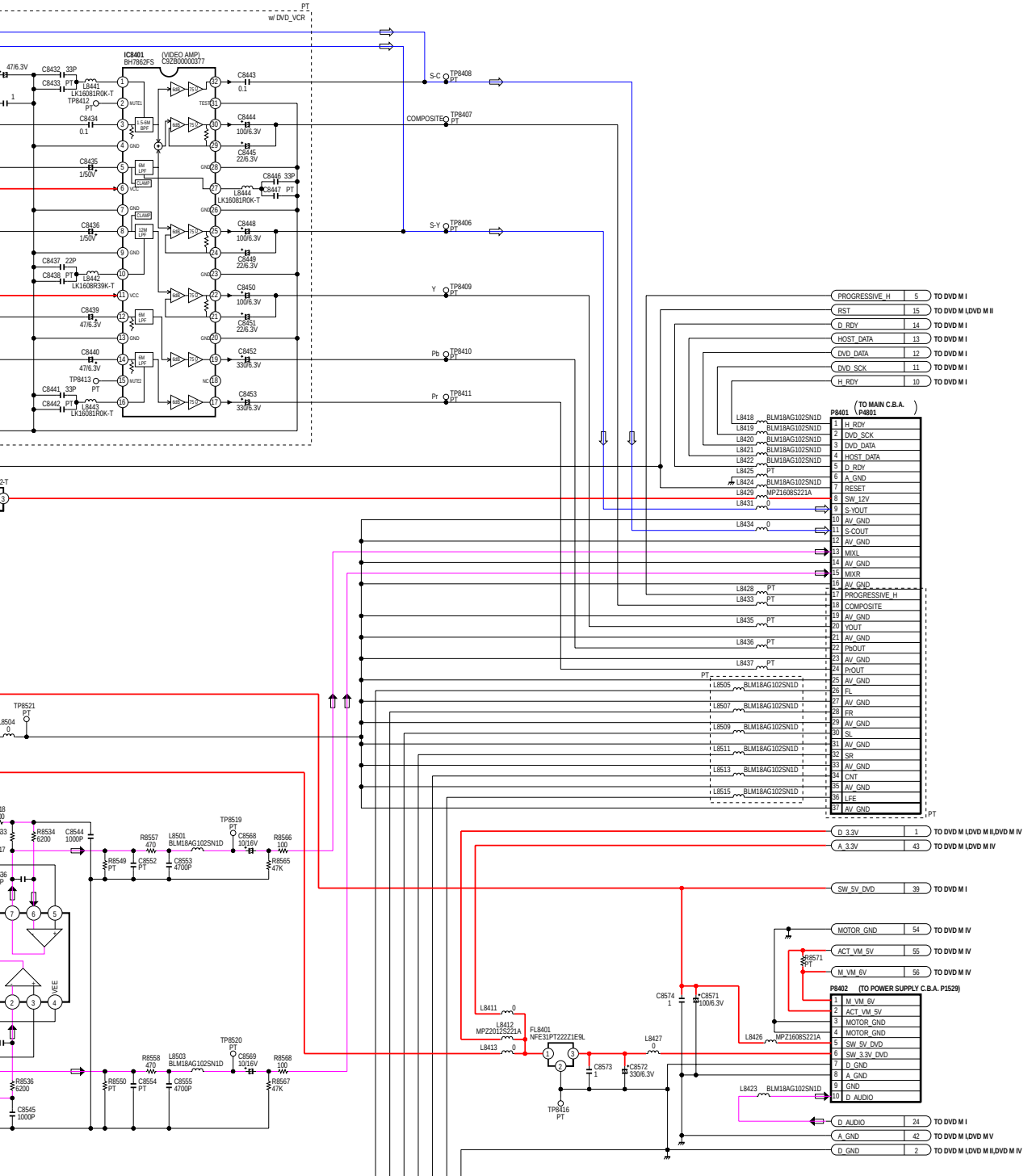
NOTE:
PARTS MARKED "PT" ARE NOT USED.



RKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

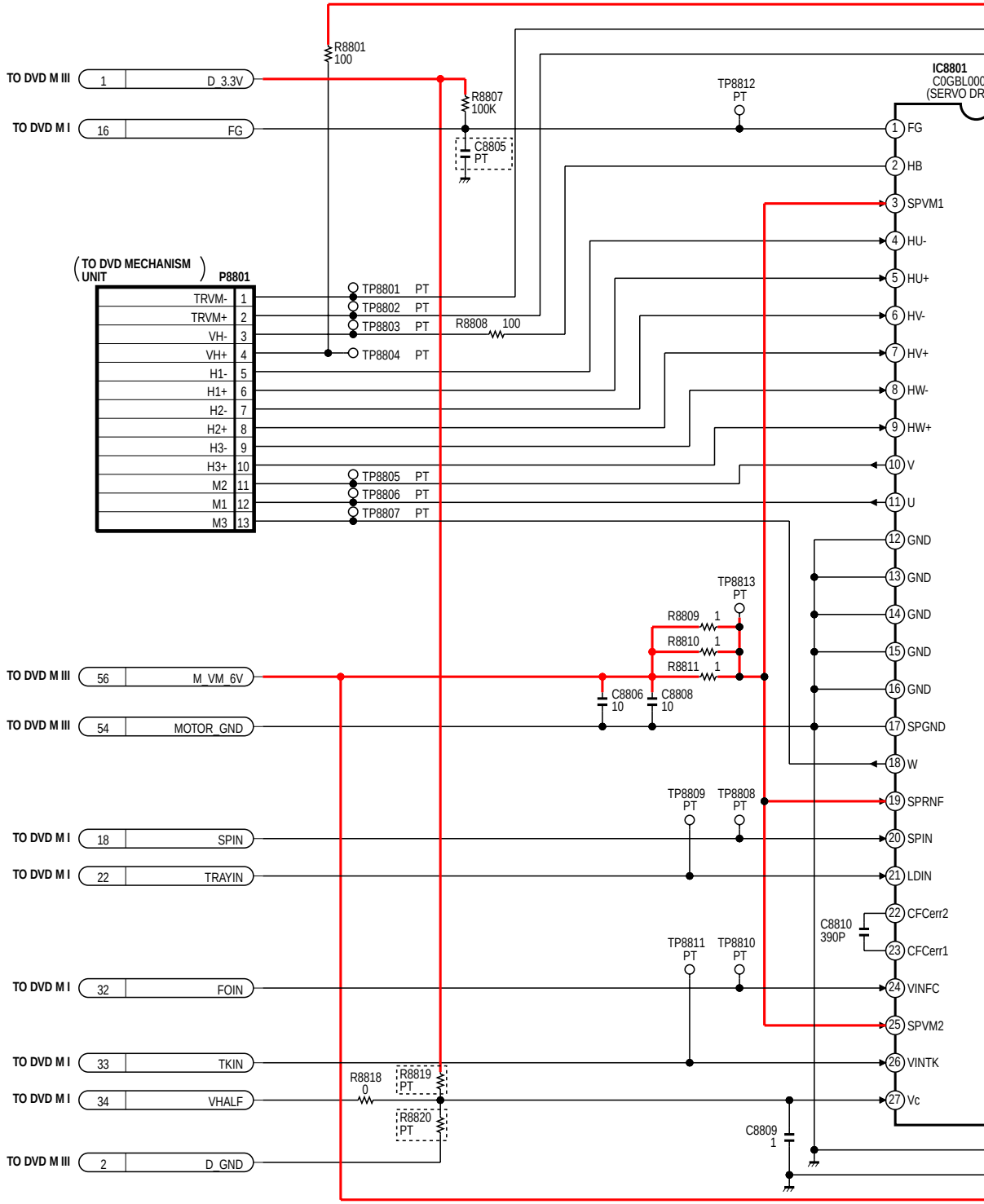


LINK TO VOLTAGE CHART

LSJB2091
DVD MAIN III SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

DVD MAIN IV SCHEMATIC DIAGRAM

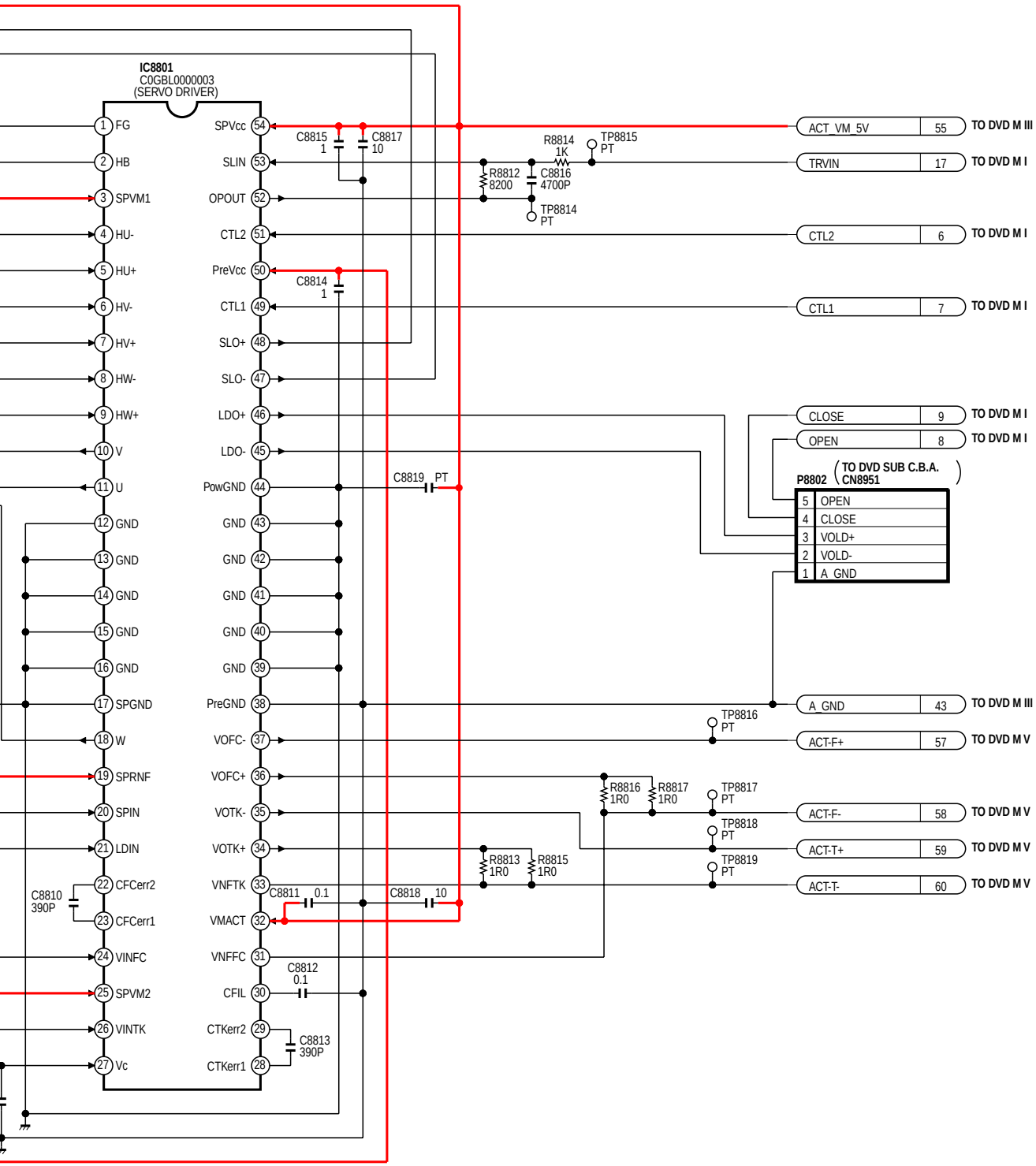
NOTE:
PARTS MARKED "PT" ARE NOT USED.



RKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

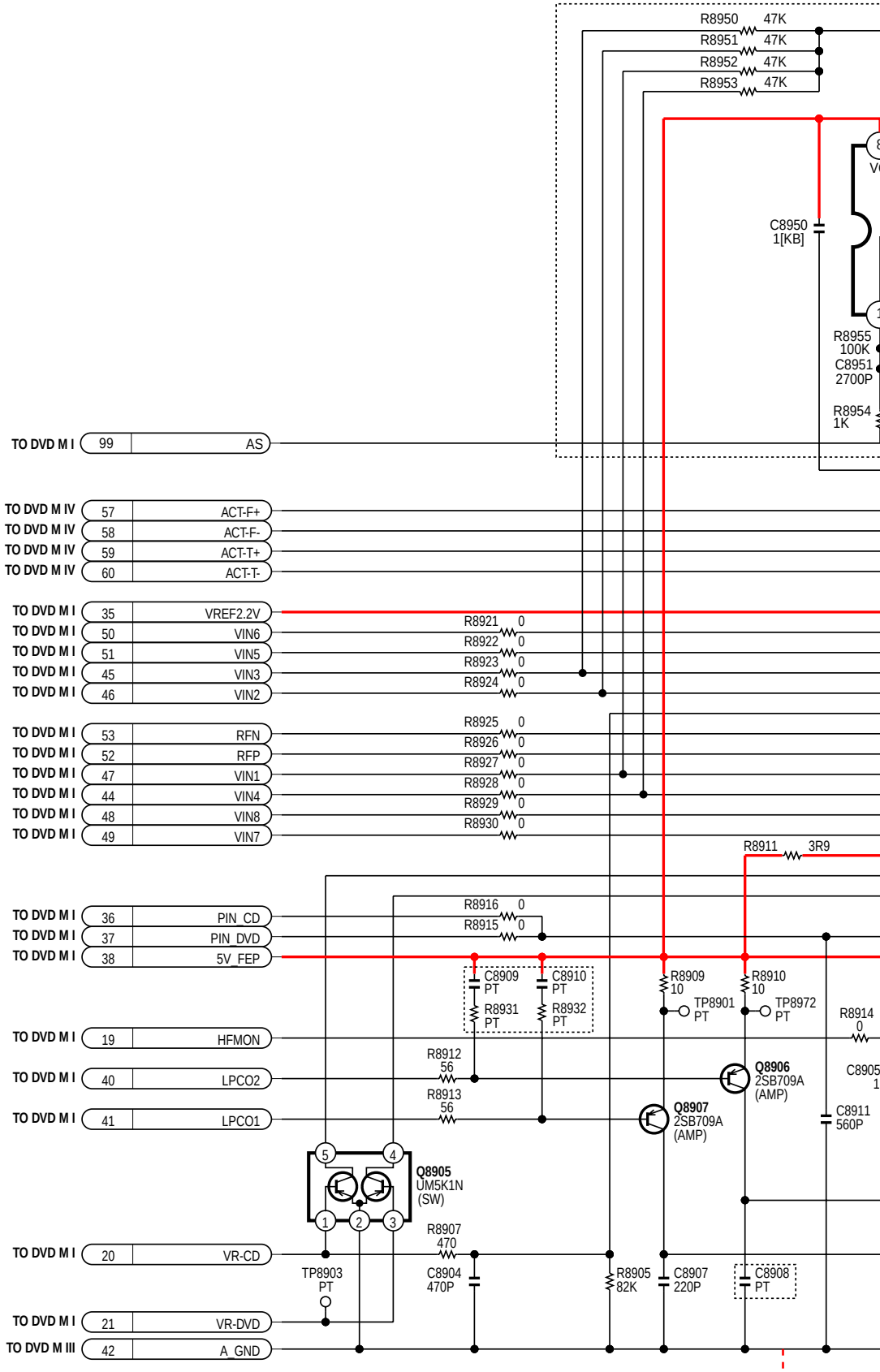


LINK TO VOLTAGE CHART

LSJB2091
DVD MAIN IV SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

DVD MAIN V SCHEMATIC DIAGRAM

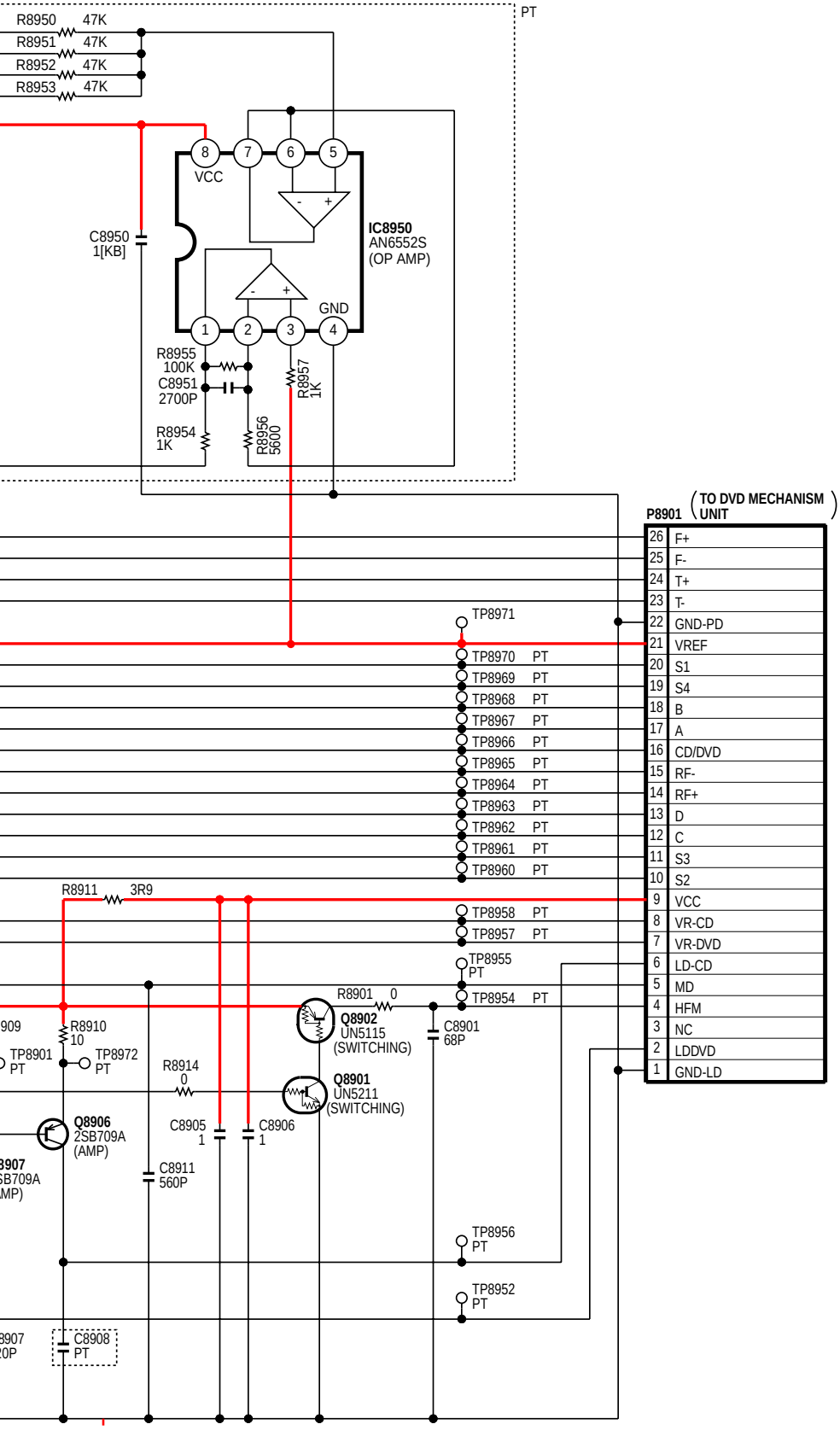
NOTE:
PARTS MARKED "PT" ARE NOT USED.



RKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.



LINK TO VOLTAGE CHART

LSJB2091
DVD MAIN V SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

RKED "PT" ARE NOT USED.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

DVD MECHANISM
IT

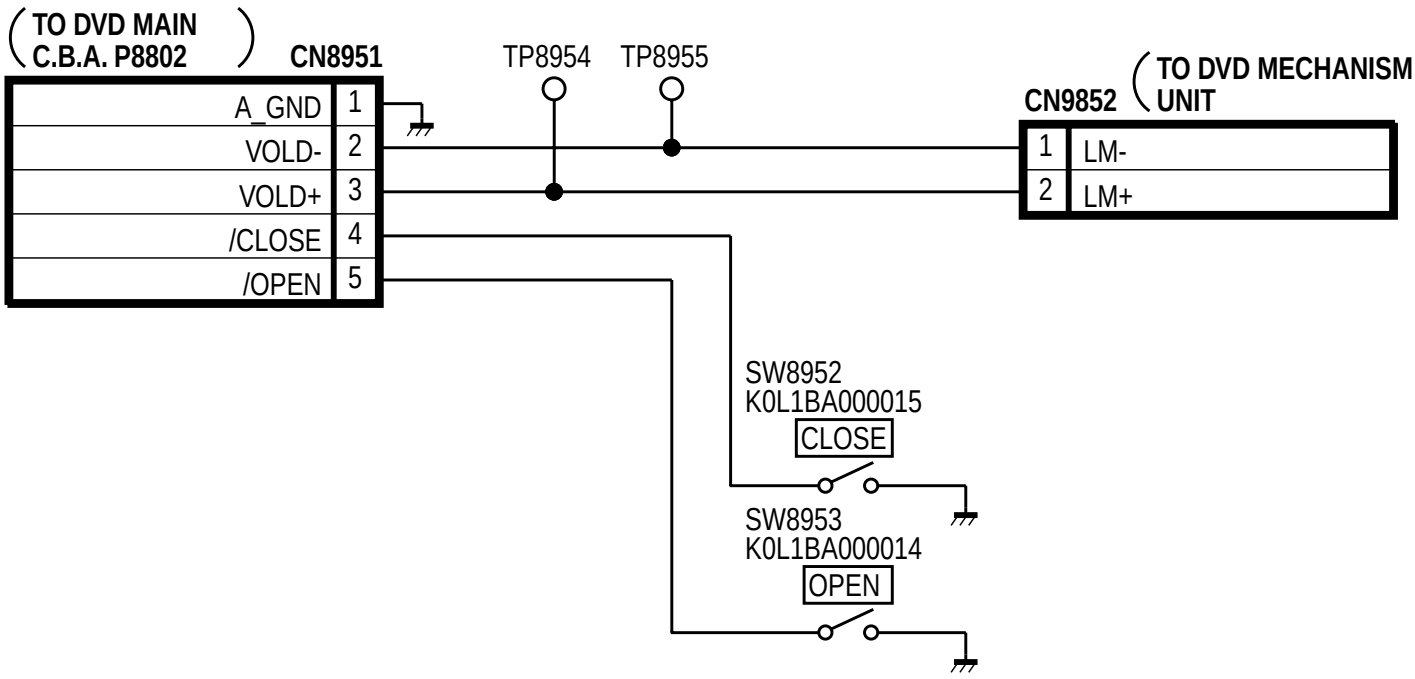
LINK TO VOLTAGE CHART

LSJB2014
DVD SUB SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

8.7. DVD SUB SCHEMATIC DIAGRAM

DVD SUB SCHEMATIC DIAGRAM

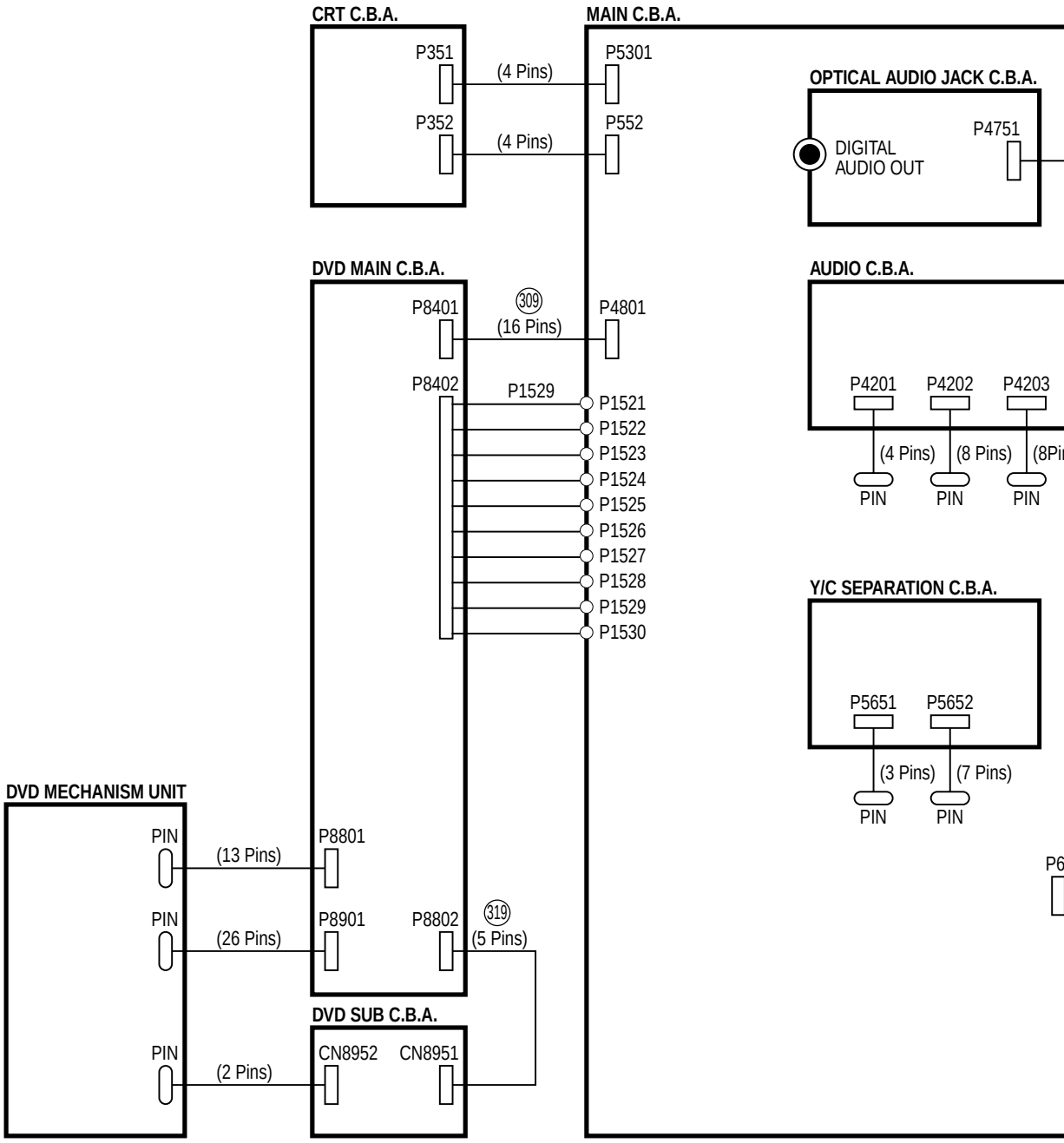
NOTE:
PARTS MARKED "PT" ARE NOT USED.



8.8. INTERCONNECTION SCHEMATIC DIAGRAM

INTERCONNECTION SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCU
REFER TO BEGINNING OF SCHEMATIC

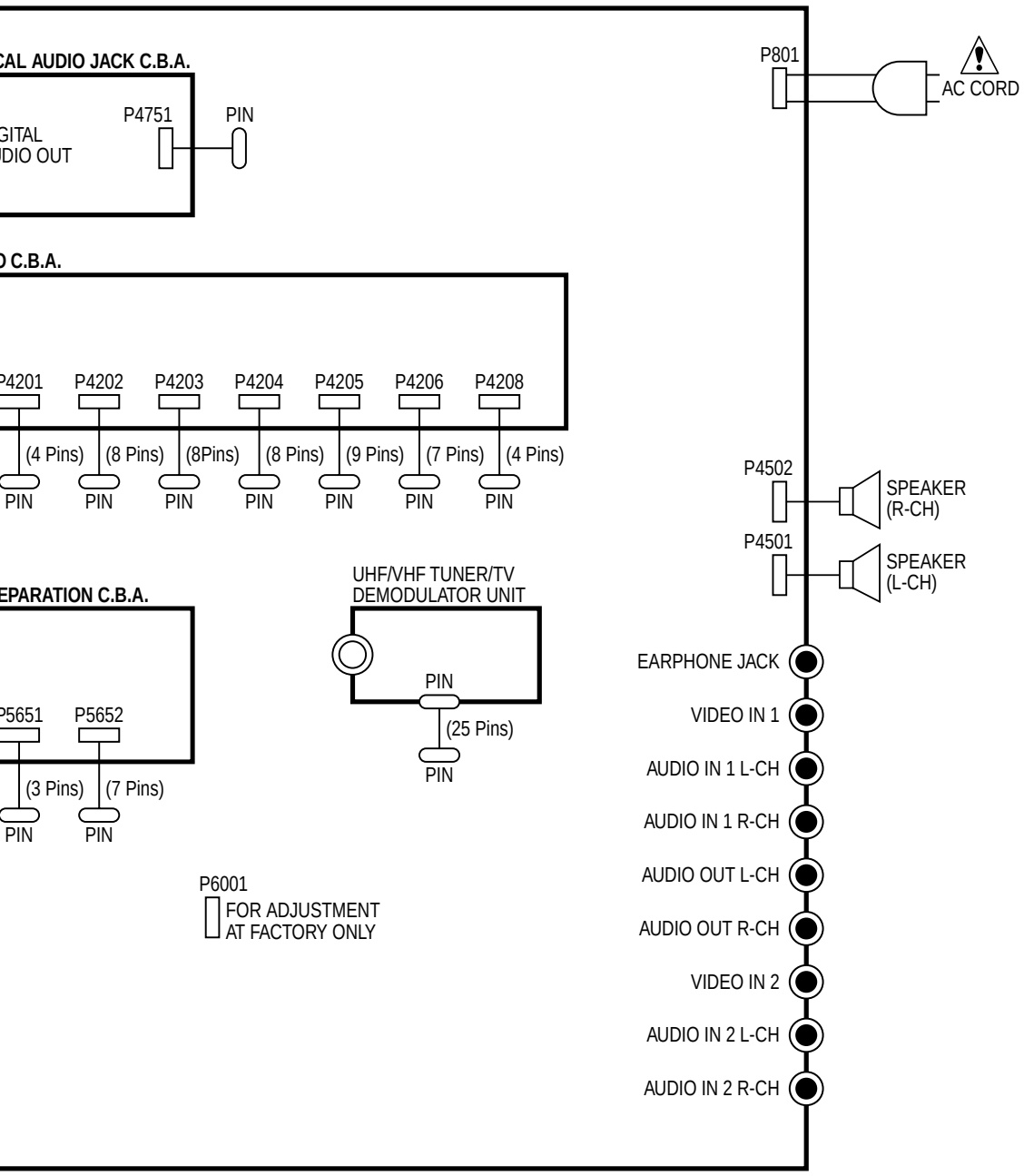


SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
ER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts lis
Do not use the part number on this diagram.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE
SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,
USE ONLY THE SPECIFIED PARTS.



INTERCONNECTION SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

MAIN C.B.A. (POWER SUPPLY/VIDEO/AUDIO SECTION)

MODE / PIN NO.	STOP
IC451	
1	0
2	4.0
3	5.6
4	5.7
5	0
6	5.8
7	5.1
8	27.9
9	2.1
10	1.5
11	0
12	13.1
13	28.3
IC850	
1	2.0
2	0.2
3	124.9
4	17.0
5	0
IC1501	
1	170.9
2	0.1
3	0
4	13.2
5	1.7
IC1502	
1	5.0
2	3.9
3	4.7
4	13.2
IC1503	
1	2.5
2	0
3	3.9
IC1504	
1	0
2	2.8
3	3.3
4	3.3
5	4.7
IC4501	
1	12.2
2	5.4
3	0
4	5.4
5	3.2
6	1.5
7	0
8	1.5
9	0
10	5.4
11	0
12	5.4
IC4701	

MODE / PIN NO.	STOP
1	5.8
2	5.8
3	5.8
4	0
5	5.8
6	5.8
7	5.8
8	12.0
IC5301	
1	---
2	0.2
3	3.9
4	---
5	0.2
6	0.2
7	0.2
8	0.4
9	0
10	0.2
11	0.2
12	2.4
13	4.2
14	6.2
15	4.5
16	0.2
17	0
18	1.0
19	1.7
20	0
21	3.2
22	3.2
23	0.2
24	9.2
25	3.7
26	9.0
27	0
28	0.3
29	0.3
30	5.9
31	6.3
32	3.6
33	6.3
34	8.2
35	0.3
36	4.3
37	9.8
38	9.0
39	0.2
40	0.2
41	0.2
42	0.2
43	0.2
44	0.2
45	---
46	2.7

MODE / PIN NO.	STOP
47	5.0
48	0.2
IC5361	
1	1.9
2	0
3	2.0
4	3.5
5	2.2
6	5.0
7	1.5
8	0
IC5601	
1	0
2	1.5
3	5.0
4	2.0
5	0
6	2.0
Q431	
E	2.9
C	0
B	2.3
Q501	
E	0
C	83.2
B	0.5
Q531	
E	11.7
C	0
B	10.9
Q523	
E	130.0
C	0.1
B	130.0
Q591	
E	0
C	12.2
B	0
Q801	
E	0
C	0.2
B	0.8
Q1501	
E	30.3
C	31.1
B	30.6
Q1502	
E	31.1
C	1.0
B	30.3
Q1503	
E	0
C	30.6

MODE / PIN NO.	STOP
B	-0.1
Q1504	
E	0
C	30.1
B	0.3
Q1505	
E	12.2
C	14.4
B	12.7
Q1506	
E	0.1
C	12.2
B	0
Q1507	
E	5.2
C	5.3
B	6.0
Q1508	
E	0
C	12.7
B	0.6
Q1509	
E	0
C	0
B	0
Q1510	
E	0
C	11.9
B	1.5
Q1511	
E	0
C	0
B	0
Q4701	
E	5.4
C	12.0
B	6.3
Q5301	
E	4.3
C	0
B	3.7
Q5302	
E	7.6
C	9.0
B	8.2
Q5303	
E	3.0
C	9.0
B	3.7
Q5353	
E	3.6
C	9.0
B	0
Q5354	
E	1.0

MODE / PIN NO.	STOP
C	9.0
B	0.1
Q5355	
E	0
C	0.1
B	4.6
Q5381	
E	0
C	3.9
B	0
Q5901	
E	9.0
C	11.7
B	9.7
Q7002	
E	2.0
C	5.0
B	2.0
TP501	130.2
TP502	0
TP551	-7.8
TP552	-9.5
TP553	5.7
TP554	20.0
TP556	200.0
TP558	27.9
TP559	0
TP560	0
TP808	3.5
TP809	0
TP810	0.2
TP891	130.0
TP892	158.2
TP893	0
TP1507	30.0
TP1508	12.0
TP1509	5.0
TP1510	12.0
TP1511	5.0
TP1512	5.0
TP1513	0
TP1514	5.0
TP4001	4.6
TP4004	5.1
TP4011	0.6
TP4014	4.8
TP4591	10.1
TP4592	0
TP4853	0
TP4854	0
TP5009	0
TP5019	0
TP5301	3.3
TP5302	3.3

MODE / PIN NO.	STOP
TP5303	3.5
TP5304	12.0
TP5305	2.9
TP5307	2.2
TP5308	2.2
TP5310	8.4
TP5312	1.0
TP5401	4.0
TP5402	2.3
TP5501	0.7
TP5503	1.7
TP5505	0
TP5506	5.7

MAIN C.B.A. (SYSTEM CONTROL SECTION)

MODE / PIN NO.	STOP
IC6001	
1	5.2
2	0
3	5.2
4	0
5	4.8
6	0.1
7	0
8	5.0
9	---
10	0
11	1.7
12	1.9
13	0
14	5.1
15	0.1
16	5.1
17	3.9
18	5.2
19	5.1
20	0
21	0
22	---
23	---
24	0
25	5.2
26	5.2
27	---
28	5.0
29	---
30	0.6
31	5.1
32	5.1
33	---
34	---
35	0
36	5.0
37	2.4
38	2.4
39	0
40	0.2
41	0.2
42	0.2
43	3.8
44	5.0
45	4.0
46	3.8
47	---
48	0
49	3.2
50	2.6
51	5.0
52	2.5
53	2.6
54	0

MODE / PIN NO.	STOP
55	0.1
56	4.5
57	4.3
58	0
59	0
60	0
61	0
62	0
63	0
64	0
65	0
66	4.2
67	2.9
68	2.6
69	---
70	---
71	0
72	---
73	5.0
74	2.6
75	2.6
76	---
77	0.1
78	0.1
79	0.1
80	0.1
81	0.1
82	0.1
83	0
84	2.7
85	0.1
86	5.2
87	0.1
88	5.2
89	5.2
90	5.2
91	5.2
92	5.2
93	5.0
94	5.1
95	0
96	---
97	---
98	0.1
99	---
100	0.1
IC6004	
1	0
2	0
3	0
4	0
5	5.3
6	5.2
7	0
8	5.0

MODE / PIN NO.	STOP
IC6005	
1	5.2
2	5.0
3	0
4	0
5	5.0
6	0
Q6003	
E	0
C	0.1
B	0.8
Q6004	
E	5.0
C	5.2
B	4.5
Q6005	
E	5.0
C	5.0
B	4.4
Q6006	
E	0
C	5.2
B	0
TP6001	5.2
TP6007	0
TP6008	0
TP6009	5.0
TP6013	5.2
TP6101	5.2
TP6103	5.1
TP6104	5.0
TP6105	1.7
TP6106	5.2
TP6107	0.1
TP6108	5.1
TP6109	5.1
TP6111	0
TP6401	0

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

AUDIO C.B.A.

MODE / PIN NO.	STOP
IC4301	
1	5.9
2	5.8
3	5.9
4	5.9
5	0
6	0
7	0
8	0
9	12.0
10	12.0
11	5.9
12	5.9
13	5.9
14	0
15	5.9
16	12.0
IC4303	
1	5.9
2	6.0
3	6.0
4	6.0
5	6.0
6	0
7	0
8	0
9	0
10	12.0
11	6.0
12	5.9
13	6.0
14	6.0
15	6.0
16	12.0
IC4352	
1	0
2	0
3	0
4	0
5	6.1
6	6.1
7	6.1
8	12.0
IC4601	
1	0
2	4.4
3	4.4
4	4.4
5	4.4
6	4.4
7	0
8	0
9	0
10	5.2
11	5.3

MODE / PIN NO.	STOP
12	1.0
13	1.0
14	2.0
15	2.0
16	9.0
17	4.4
18	4.5
19	4.4
20	4.4
21	4.4
22	0
IC9001	
1	---
2	1.3
3	2.5
4	1.3
5	0.5
6	0.5
7	---
8	---
9	0.1
10	5.0
11	0.1
12	---
13	1.3
14	1.3
15	2.6
16	---
17	0.5
18	0.5
19	5.0
20	---
21	4.2
22	1.3
23	1.3
24	5.0
25	0
26	---
27	0.1
28	0.5
29	4.2
30	4.2
31	---
32	2.6
IC9201	
1	2.9
2	3.6
3	5.0
4	4.4
5	0
6	5.1
7	4.4
8	3.0
9	3.1

MODE / PIN NO.	STOP
Q4301	
E	0
C	12.0
B	0
Q4302	
E	0
C	12.0
B	0
Q4303	
E	0
C	12.0
B	0
Q4304	
E	0
C	0
B	5.1
Q4352	
E	6.0
C	12.0
B	6.6
Q4353	
E	0
C	12.0
B	0
Q4354	
E	12.0
C	0.2
B	12.1
Q4355	
E	0
C	12.1
B	0.2
Q9001	
E	3.6
C	5.0
B	4.3
Q9002	
E	0
C	0
B	0.8
Q9003	
E	1.4
C	12.0
B	2.0
Q9004	
E	1.4
C	12.0
B	2.0
TP4201	0
TP4202	0
TP9001	6.0
TP9002	6.0
TP9003	0
TP9201	2.3

Y/C SEPARATION C.B.A.

MODE / PIN NO.	STOP
IC5651	
1	0
2	0.1
3	2.9
4	2.5
5	1.4
6	0
7	0
8	5.2
9	0
10	2.5
11	2.3
12	3.5
13	4.0
14	1.7
15	3.6
16	5.1
Q5651	
E	1.8
C	0
B	1.3
Q5652	
E	1.8
C	2.5
B	1.3
Q5653	
E	2.4
C	0
B	1.8
Q5654	
E	2.5
C	0
B	1.9
Q5655	
E	3.0
C	9.1
B	4.0
Q5656	
E	3.3
C	9.1
B	4.0
Q5657	
E	1.1
C	4.2
B	1.7
Q5658	
E	1.1
C	9.0
B	1.7
TP5651	2.4
TP5652	3.3

OPTICAL AUDIO JACK C.B.A.

MODE / PIN NO.	STOP
IC4751	
1	0
2	5.0
3	0.3

CRT C.B.A.

MODE / PIN NO.	STOP
Q351	
E	3.1
C	131.1
B	3.5
Q352	
E	3.1
C	127.9
B	3.5
Q353	
E	3.0
C	131.9
B	3.5
TP47	0
TP49	3.5
TP50	131.9

DVD MAIN C.B.A.

MODE / PIN NO.	STOP
IC8001	
1	3.3
2	---
3	---
4	0
5	---
6	---
7	3.3
8	---
9	---
10	---
11	0
12	---
13	---
14	3.3
15	1.5
16	0
17	3.4
18	3.4
19	---
20	---
21	---
22	---
23	3.3
24	0
25	0.4
26	0.9
27	---
28	---
29	3.3
30	0
31	---
32	---
33	2.2
34	---
35	---
36	---
37	---
38	0.3
39	0.1
40	---
41	---
42	3.3
43	0
44	---
45	---
46	2.0
47	---
48	---
49	---
50	3.4
51	3.4
52	---
53	3.4
54	3.4

MODE / PIN NO.	STOP
55	3.3
56	3.3
57	0
58	0
59	3.3
60	3.4
61	3.1
62	---
63	3.4
64	---
65	0.1
66	1.2
67	1.6
68	3.4
69	0
70	1.7
71	2.4
72	---
73	---
74	---
75	3.4
76	---
77	---
78	0.1
79	3.3
80	0
81	---
82	---
83	---
84	---
85	---
86	---
87	---
88	---
89	---
90	---
91	3.3
92	1.7
93	0
94	---
95	3.4
96	3.4
97	3.4
98	1.6
99	0
100	---
101	---
102	---
103	---
104	3.3
105	0.9
106	0
107	0.8
108	1.6
109	2.1

MODE / PIN NO.	STOP
110	2.6
111	2.0
112	0.7
113	2.1
114	1.8
115	1.4
116	0.3
117	1.6
118	3.3
119	0
120	1.9
121	1.9
122	2.4
123	2.4
124	2.4
125	2.4
126	2.0
127	2.0
128	2.0
129	2.0
130	2.2
131	2.3
132	0.4
133	1.2
134	0.4
135	0.2
136	2.3
137	1.7
138	0
139	1.7
140	1.7
141	1.7
142	1.7
143	0.5
144	1.6
145	3.3
146	1.8
147	---
148	---
149	3.3
150	1.7
151	0
152	1.7
153	3.3
154	1.4
155	0
156	2.2
157	3.3
158	0.7
159	0
160	0.5
161	0.5
162	1.4
163	---
164	0.9

MODE / PIN NO.	STOP
165	3.3
166	1.5
167	0
168	2.1
169	0
170	0.8
171	3.3
172	1.6
173	---
174	1.8
175	1.7
176	1.4
177	0
178	---
179	---
180	---
181	1.7
182	3.3
183	0
184	---
185	---
186	1.5
187	---
188	---
189	3.3
190	---
191	---
192	---
193	---
194	0
195	3.3
196	---
197	---
198	0
199	---
200	---
201	---
202	3.3
203	---
204	---
205	---
206	0
207	2.4
208	2.4
209	3.3
210	---
211	0
212	---
213	1.5
214	---
215	0
216	---
217	---
218	3.3
219	---

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

DVD SUB
C.B.A.

MODE / PIN NO.	STOP
220	---
221	0
222	1.5
223	1.9
224	0
225	1.9
226	3.3
227	---
228	---
229	---
230	0
231	---
232	3.3
233	3.3
234	1.6
235	---
236	0
237	1.7
238	3.0
239	3.3
240	3.3
241	0
242	3.2
243	2.4
244	1.5
245	0
246	2.4
247	---
248	0
249	---
250	3.3
251	---
252	---
253	---
254	0
255	---
256	---
IC8002	
1	0
2	0
3	0
4	0
5	3.3
6	3.2
7	0
8	3.3
IC8003	
1	3.3
2	0
3	0.3
4	1.7
5	3.3
6	0
7	1.5
8	1.4

MODE / PIN NO.	STOP
9	---
10	1.6
11	0
12	3.3
13	---
14	0.1
15	1.6
16	3.3
IC8005	
1	0
2	2.7
3	1.5
4	1.2
5	0
IC8201	
1	0.5
2	0.6
3	1.0
4	0.8
5	2.0
6	1.3
7	0
8	1.1
9	0.1
10	0.1
11	3.3
12	3.1
13	---
14	3.3
15	0.1
16	3.3
17	3.3
18	3.3
19	0.1
20	0
21	3.3
22	0.1
23	3.3
24	0
25	2.9
26	1.9
27	1.7
28	0.7
29	3.3
30	3.3
31	0.1
32	0.1
33	0.1
34	3.3
35	0.1
36	0.1
37	3.3
38	3.3
39	3.3
40	3.3

MODE / PIN NO.	STOP
41	0.1
42	3.3
43	1.0
44	3.3
45	3.3
46	0
47	3.3
48	0.6
IC8202	
1	0.1
2	2.9
3	0.1
4	3.3
5	3.3
6	1.2
7	3.3
8	3.3
9	3.3
10	0
11	0.1
12	0.1
13	0.1
14	0.1
15	0.1
16	0
17	0.1
18	0.1
19	0.1
20	3.3
IC8203	
1	1.4
2	3.3
3	0.1
4	0.1
5	0.4
6	0.1
7	0.1
8	0.1
9	0.4
10	0
11	0.1
12	0
13	0
14	0
15	0
16	0
17	0
18	0
19	0
20	3.3
IC8204	
1	3.3
2	1.4
3	3.3
4	2.0

MODE / PIN NO.	STOP
5	1.7
6	0
7	2.0
8	2.7
9	3.0
10	2.0
11	2.0
12	0
13	2.6
14	---
15	3.3
16	2.1
17	3.2
18	3.1
19	3.2
20	3.0
21	0.1
22	1.5
23	1.6
24	0.1
25	0.1
26	0.3
27	0.4
28	0.4
29	3.3
30	---
31	2.6
32	0
33	2.0
34	2.0
35	3.3
36	2.0
37	2.7
38	0
39	2.0
40	2.0
41	3.3
42	2.3
43	3.3
44	0
45	0.1
46	0
47	0.1
48	0
49	3.3
50	0.1
51	0
52	0
53	0
54	0.1
55	3.3
56	0
57	---
58	0
59	0

MODE / PIN NO.	STOP
60	0
61	0
62	0
63	0
64	0
65	0
66	0
67	0.1
68	0
69	---
70	---
71	0.1
72	0
73	---
74	0.1
75	3.3
76	2.4
77	2.4
78	0
79	2.4
80	2.9
81	3.3
82	0.1
83	2.4
84	0
85	0.1
86	0
IC8501	
1	1.7
2	0.1
3	1.7
4	0
5	3.3
6	5.0
7	0.1
8	0.1
9	0
10	0
11	---
12	---
13	1.6
14	0.4
15	3.3
16	0.3
IC8503	
1	6.2
2	1.0
3	6.2
4	0
5	6.0
6	6.0
7	0.1
8	12.0
IC8801	
1	2.3

MODE / PIN NO.	STOP
2	5.9
3	6.1
4	5.9
5	5.9
6	5.9
7	0.1
8	5.9
9	5.9
10	2.7
11	2.7
12	0
13	0
14	0
15	0
16	0
17	0
18	2.7
19	6.1
20	1.7
21	0.8
22	0.5
23	0.9
24	1.0
25	6.1
26	1.0
27	1.7
28	0.9
29	0.6
30	0.8
31	0.8
32	5.0
33	0.8
34	0.8
35	0.8
36	0.7
37	0.7
38	0
39	0
40	0
41	0
42	0
43	0
44	0
45	0.9
46	0.9
47	0.8
48	0.8
49	0.1
50	6.0
51	0.1
52	1.7
53	1.7
54	5.0

MODE / PIN NO.	STOP
Q8401	
E	0.5
C	0
B	1.2
Q8402	
E	0
C	0
B	1.8
Q8403	
E	0.9
C	0
B	1.6
Q8404	
E	1.4
C	0
B	2.1
Q8601	
E	0
C	0.1
B	0.2
Q8602	
E	0
C	0.1
B	0.3
Q8603	
E	0.6
C	1.5
B	0.6
Q8901	
E	0
C	3.9
B	0.3
Q8902	
E	5.0
C	5.1
B	0.1
Q8905	
1	0.5
2	0
3	0.2
4	0.1
5	0.1
Q8906	
E	0.1
C	0
B	0
Q8907	
E	5.1
C	0
B	5.1

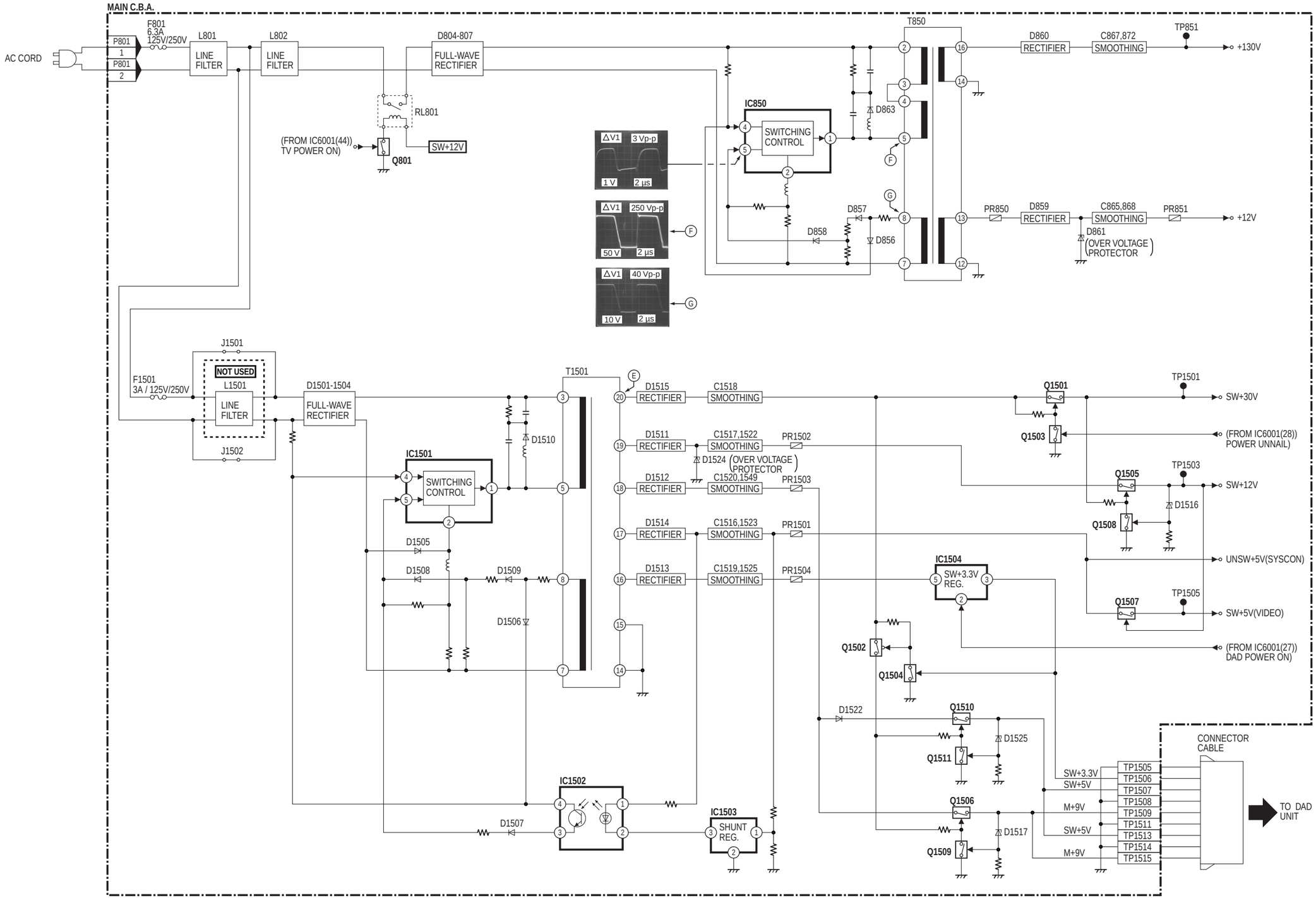
MODE / PIN NO.	STOP
TP8001	0.1
TP8002	0.1
TP8003	0.1
TP8004	3.3
TP8005	0.1
TP8006	0.1
TP8007	3.1
TP8008	3.3
TP8009	3.3
TP8010	0.1
TP8011	3.3
TP8012	0.2
TP8013	0
TP8014	0.3
TP8015	1.4
TP8016	0
TP8017	0
TP8018	0.4
TP8019	4.4
TP8401	0.3
TP8402	1.0
TP8403	0.4
TP8404	0.5
TP8405	0.4
TP8406	0
TP8407	1.1
TP8408	0.4
TP8409	0.1
TP8410	1.8
TP8411	1.8
TP8412	5.0
TP8413	5.0
TP8414	2.9
TP8415	12.1
TP8416	0
TP8501	0.1
TP8502	0.8
TP8503	0
TP8504	0.3
TP8505	0
TP8506	3.3
TP8507	3.1
TP8508	3.3
TP8509	0.1
TP8510	1.7
TP8511	0
TP8512	0
TP8513	2.6
TP8514	2.0
TP8515	2.6
TP8516	2.5
TP8517	2.6
TP8518	2.0
TP8519	0
TP8520	0

MODE / PIN NO.	STOP
TP8521	1.9
TP8601	3.3
TP8602	0.1
TP8603	3.3
TP8604	0.1
TP8605	1.6
TP8606	0.1
TP8607	0.1
TP8608	0.1
TP8609	0.1
TP8610	0.1
TP8611	0
TP8612	0.1
TP8613	3.3
TP8614	2.9
TP8615	0
TP8616	0
TP8617	1.0
TP8618	0
TP8619	0.1
TP8620	1.8
TP8621	2.0
TP8622	2.0
TP8623	0.1
TP8624	0.1
TP8625	3.3
TP8626	0.1
TP8627	0.1
TP8801	0.7
TP8802	0.5
TP8803	0
TP8804	0.9
TP8805	0.1
TP8806	2.4
TP8807	0.1
TP8808	0.7
TP8809	0.6
TP8810	1.5
TP8811	1.6
TP8812	2.6
TP8813	3.0
TP8814	-2.6
TP8815	-1.9
TP8816	0.6
TP8817	0.6
TP8818	0.2
TP8819	0.6

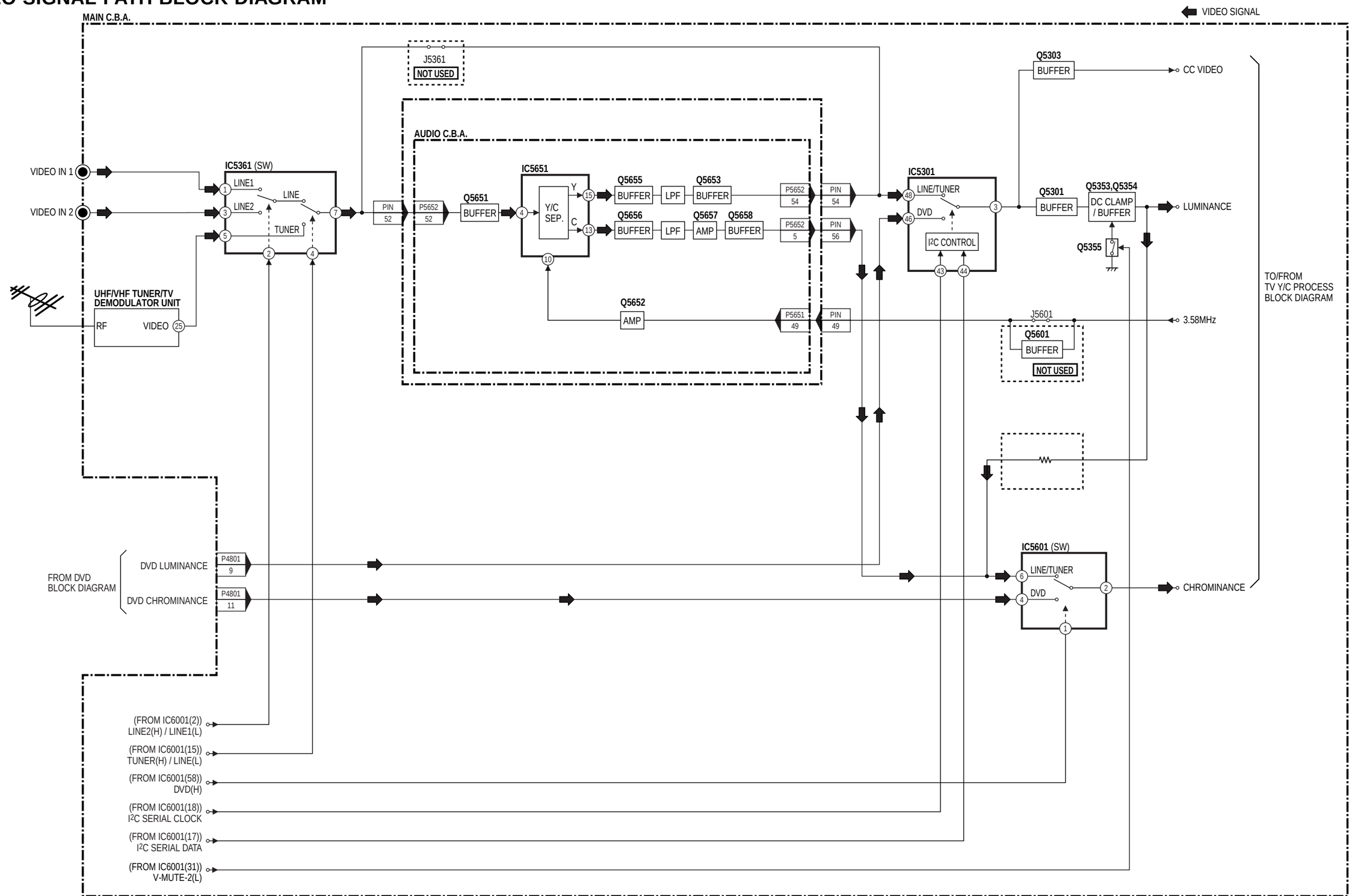
MODE / PIN NO.	STOP
TP8954	0.6
TP8955	0.7

VOLTAGE CHART
PV-20D53/PV-27D53

POWER SUPPLY BLOCK DIAGRAM

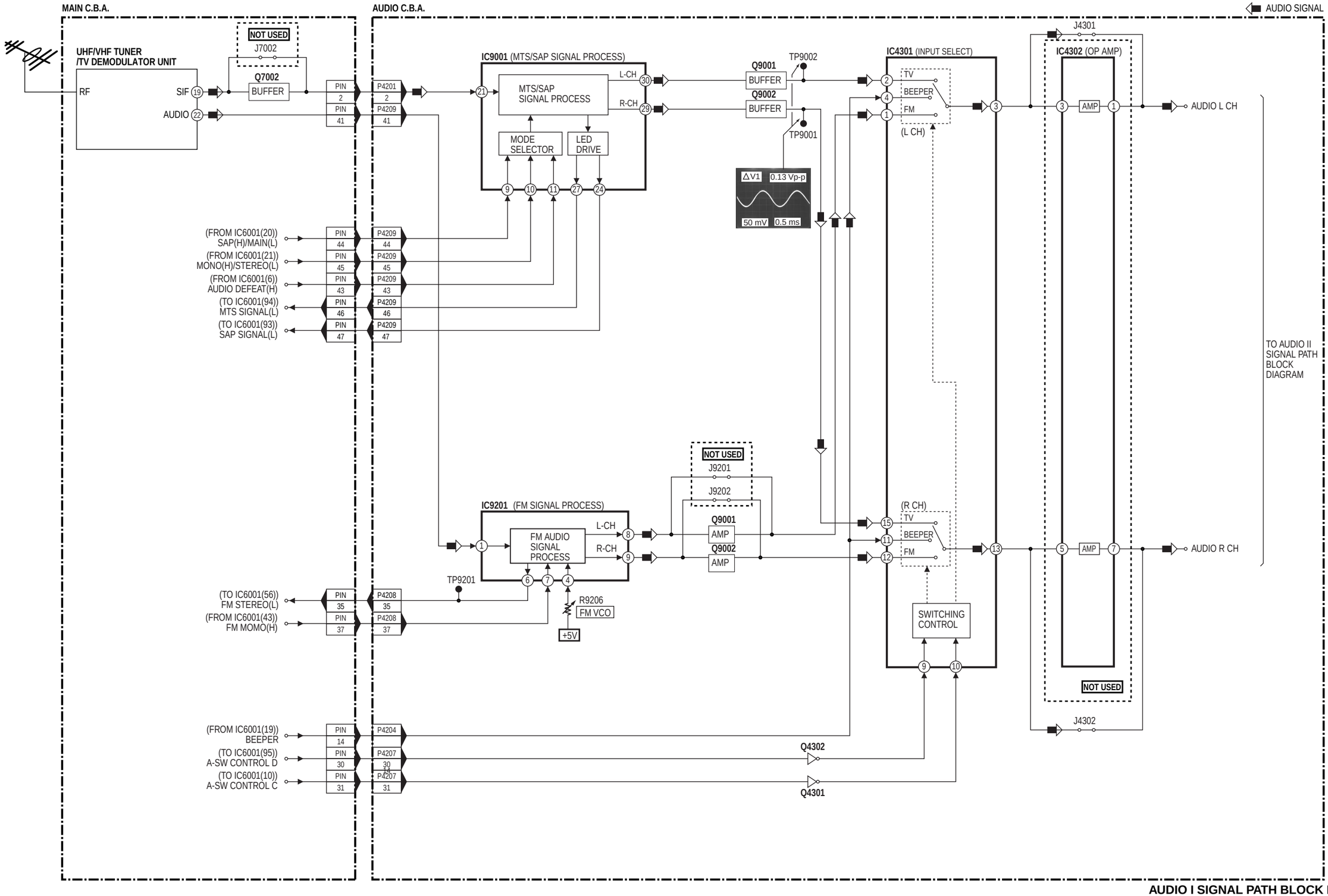


VIDEO SIGNAL PATH BLOCK DIAGRAM

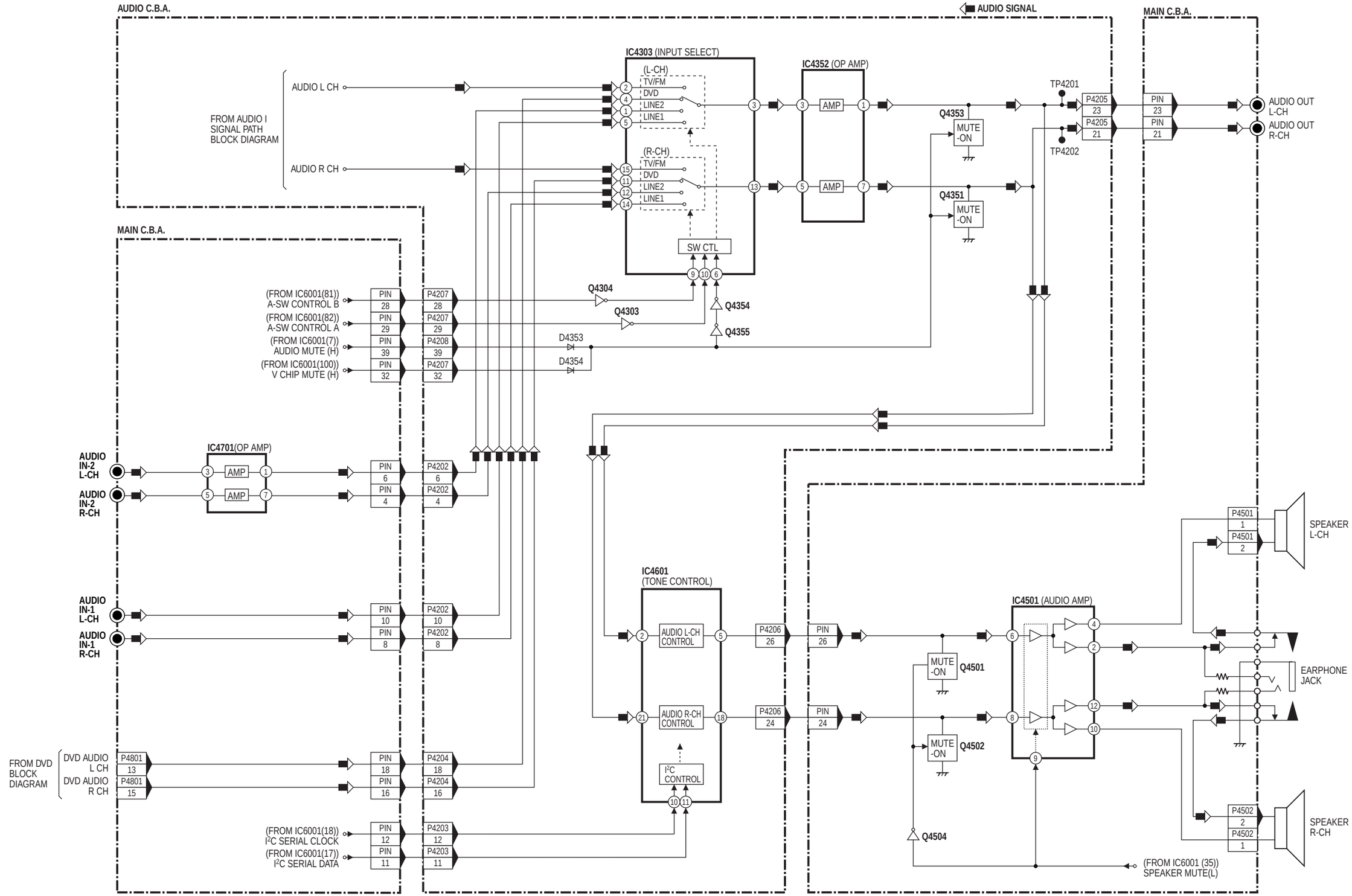


VIDEO SIGNAL PATH BLOCK DIAGRAM
PV-20D53/PV-27D53

AUDIO I SIGNAL PATH BLOCK DIAGRAM

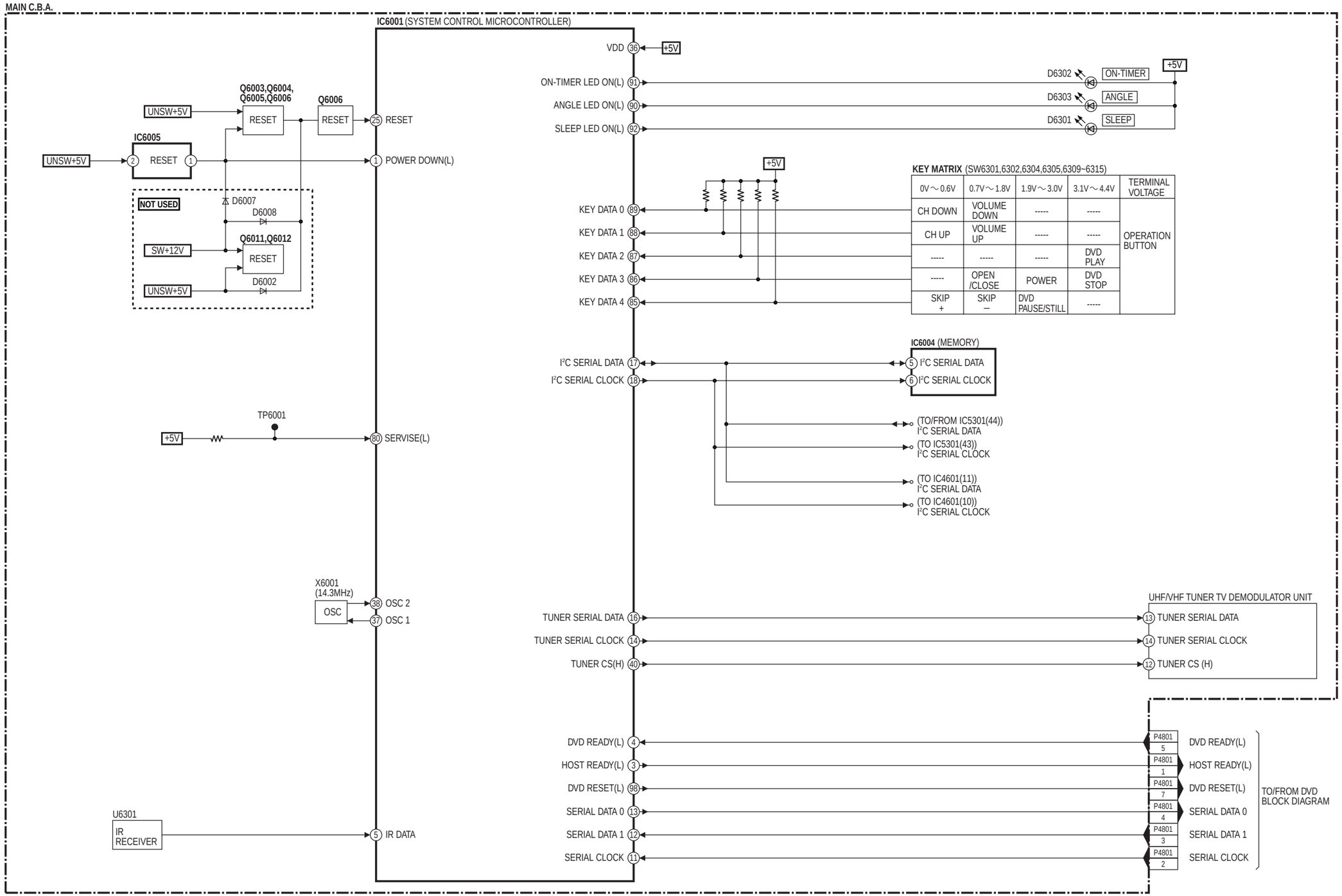


AUDIO II SIGNAL PATH BLOCK DIAGRAM

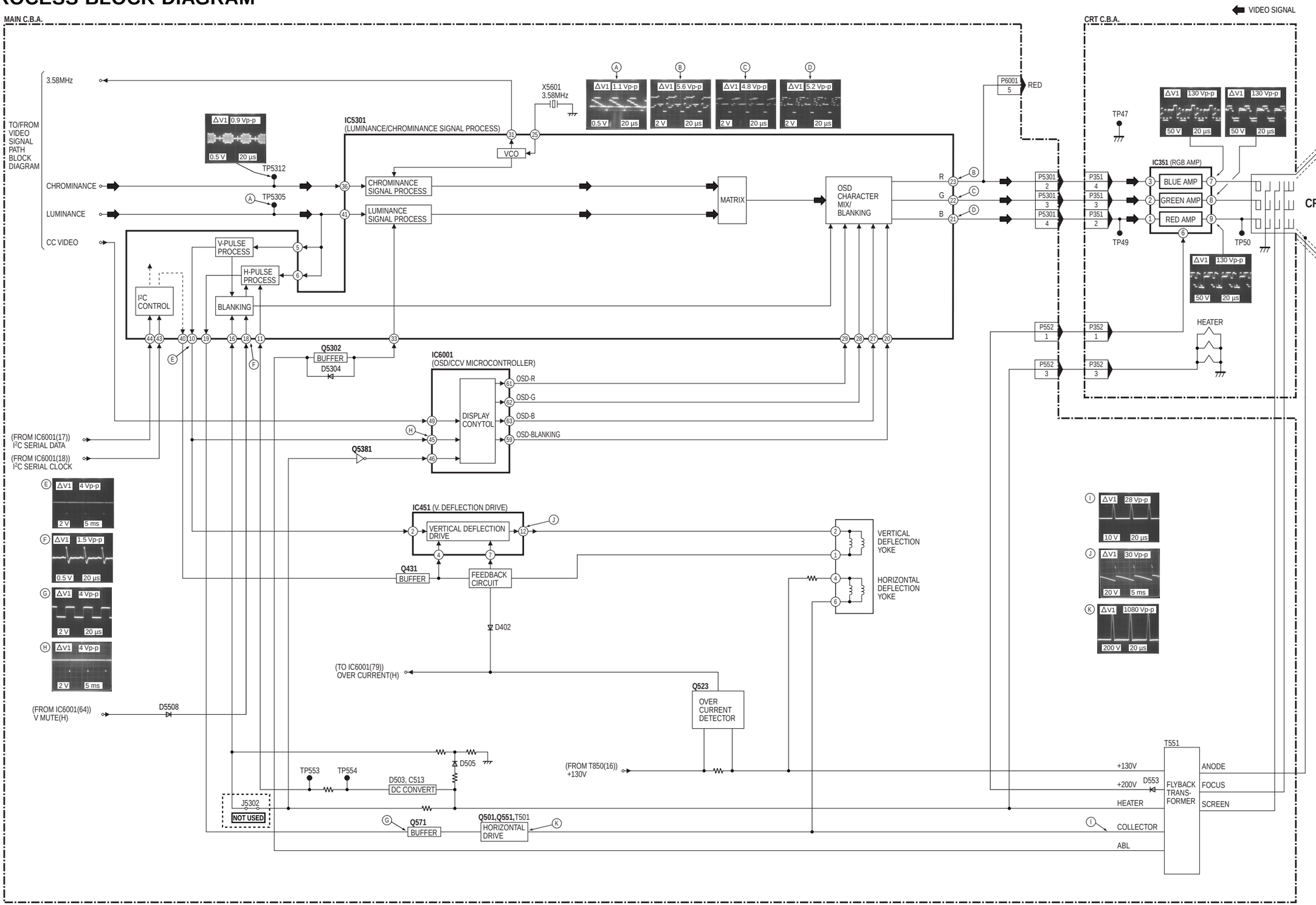


AUDIO II SIGNAL PATH BLOCK DIAGRAM
PV-20D53/PV-27D53

SYSTEM CONTROL BLOCK DIAGRAM

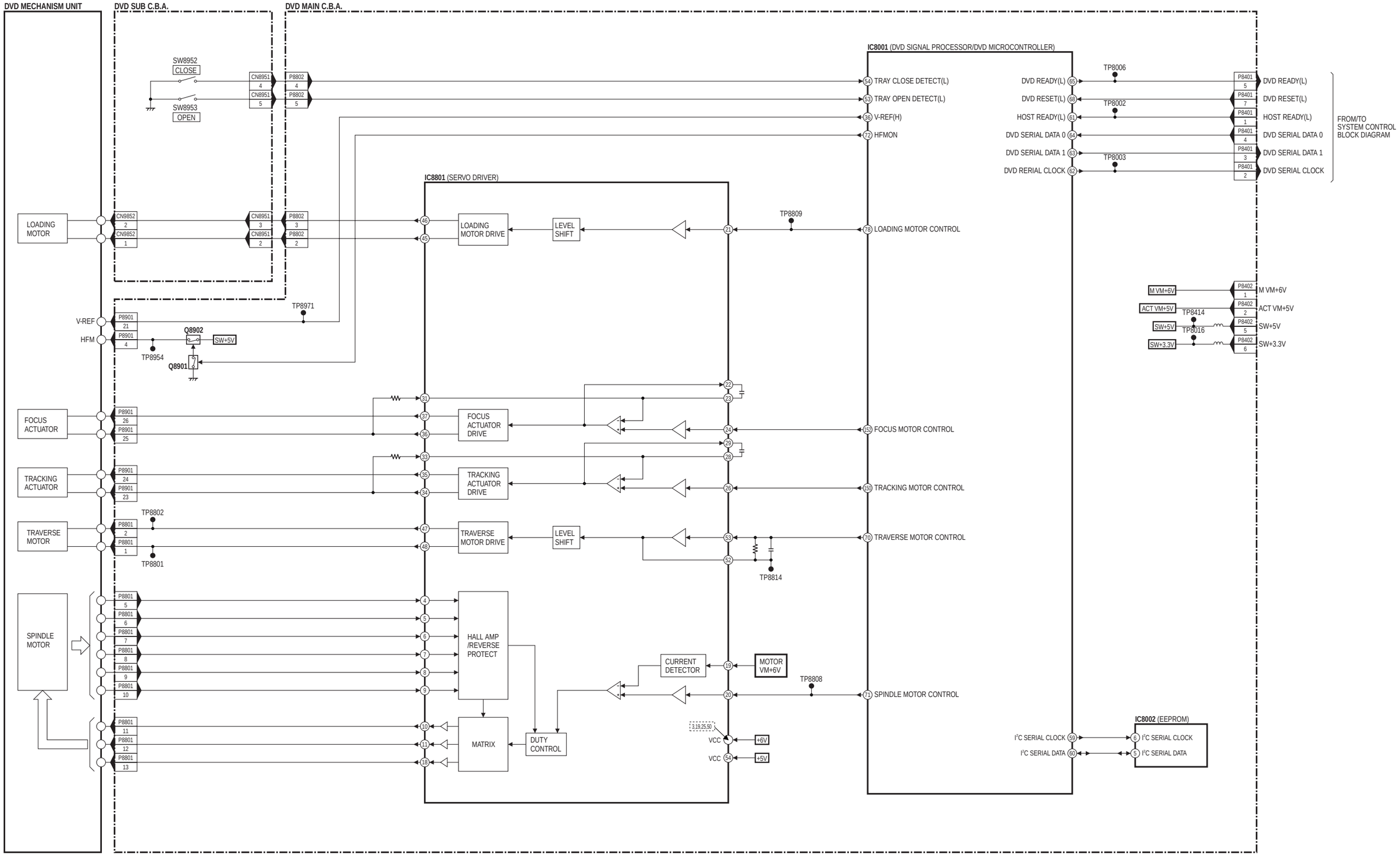


TV Y/C PROCESS BLOCK DIAGRAM



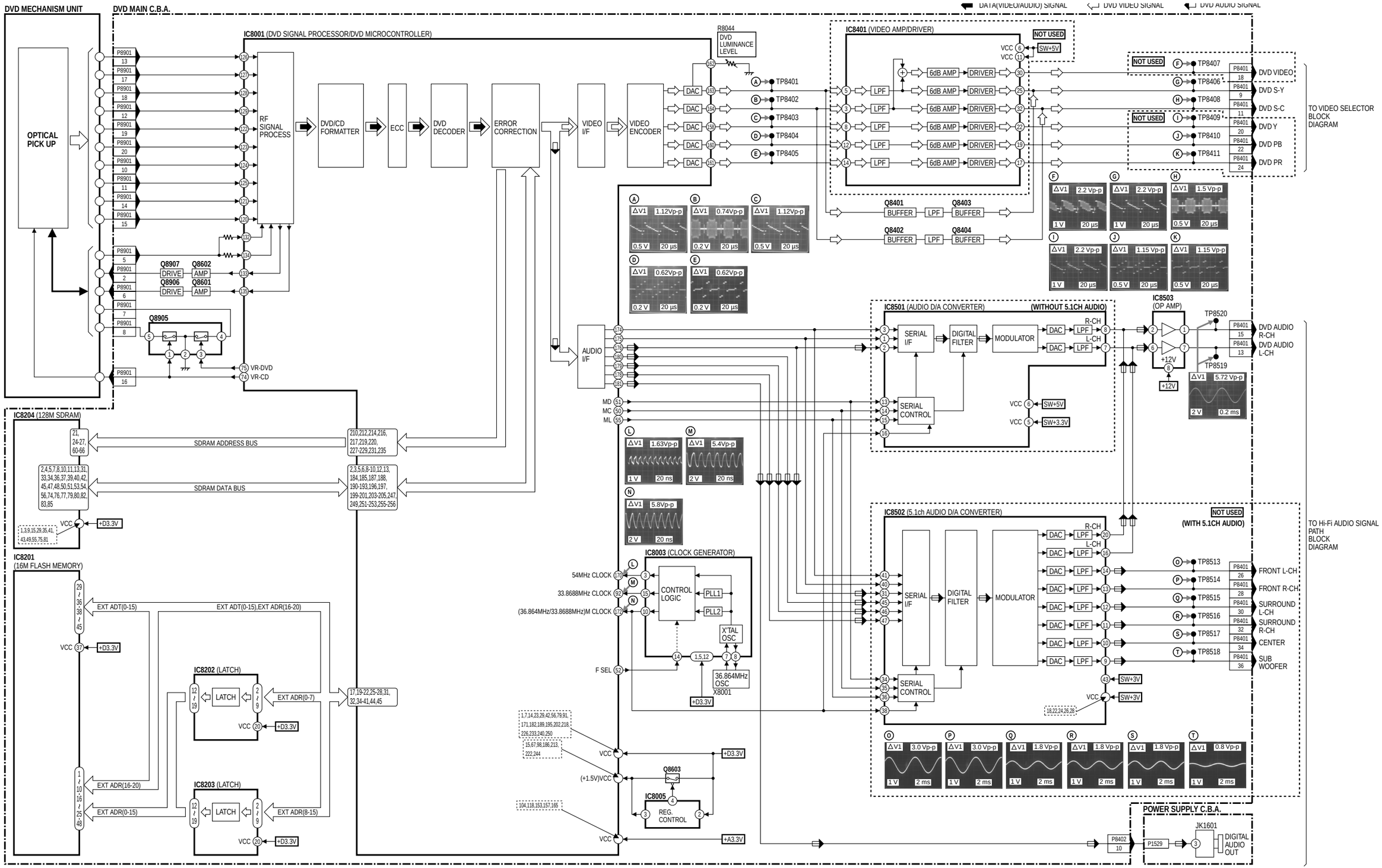
TV Y/C PROCESS BLOCK DIAGRAM
PV-20D53/PV-27D53

DVD I BLOCK DIAGRAM



DVD I BLOCK DIAGRAM
PV-20D53/PV-27D53

DVD II BLOCK DIAGRAM



DVD II BLOCK DIAGRAM
PV-20D53/PV-27D53

Troubleshooting Hints

How to confirm whether DVD circuit or other circuits is defective.

NOTE:
Host communication may not occur correctly between IC6001 on the Main C.B.A. and IC8001 on the DVD Main C.B.A. when there is a problem on the DVD Main C.B.A.
This is because the unit automatically switched to VCR mode after approx. 30 seconds even in DVD mode because the DVD Main C.B.A. shuts down. (Check the VCR mode indicator and DVD mode indicator on the Multi Function Display.) Check the voltage during the 30 seconds during which the unit remains in DVD mode.

1) Confirm DVD operation and VCR operation

1. Playback a VHS tape.
2. Playback a DVD disc.

Both NG → Main C.B.A. is defective. Repair the Main C.B.A.

No PB VCR only → Main C.B.A. is defective. Repair the Main C.B.A.

No PB DVD only →

First, confirm that the Main C.B.A. is O.K. other than DVD Mechanism Unit and DVD Main C.B.A. by referring to "Communication Timing Chart 1," and "Communication Timing Chart 2."
Check points:
1. All Power Supply Voltages for DVD circuit (TP8016 (SW_3.3V_DVD), TP8414 (SW_5V_DVD), Pin1 of P8402 (M_VM_6V), Pin2 of P8402 (ACT_VM_5V) on the DVD Main C.B.A.)
2. Output Signal from DVD Main C.B.A.(TP8006 (D_RDY)), Output Signal from Main C.B.A.(TP8002 (H_RDY)) (TP8006 (D_RDY), TP8002 (H_RDY) on the DVD Main C.B.A.)

NG → Main C.B.A. is defective. Repair the Main C.B.A.

Note:
If PR1502 on the Main C.B.A. becomes defective again after replacement, replace both DVD Mechanism Unit and IC8801 on the DVD Main C.B.A. at thesame time.

OK →

DVD circuit is defective.
Perform troubleshooting referring to "How to confirm whether DVD Mechanism Unit or DVD Main C.B.A. is defective."

How to confirm whether DVD Mechanism Unit or DVD Main C.B.A. is defective.

Confirm communication between DVD Main C.B.A. and Main C.B.A. by referring to "Communication Timing Chart 2."
Check points:
1. Output Signal from DVD Main C.B.A. (TP8003 (DVD_SCK) on the DVD Main C.B.A.)

NG → DVD Main C.B.A. is defective. Repair the DVD Main C.B.A.
IC8001 or the circuit around it is defective.

OK →

Confirm that the OPEN/CLOSE TRAY works correctly.

NG → DVD Mechanism Unit or IC8801 is defective. Repair it by referring to the "Cause: Tray Problem. "

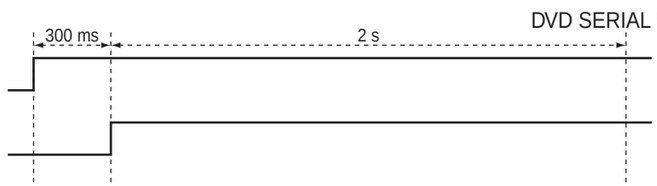
OK →

Playback the test DVD disc.

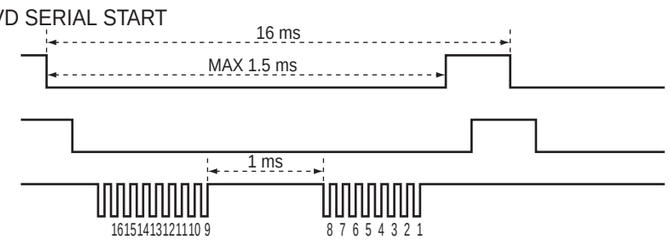
The Message "PLEASE CHECK THE DISC, AND FOR STAINS OR SCRATCHES ON DISC" appears. → DVD Mechanism Unit or IC8801 or IC8001 is defective. Repair it referring to "Cause: Spindle Motor Problem," and "Cause: Traverse Problem," "Cause: Pickup Problem."

If there is problem with audio or picture, even though it plays back. → DVD Main C.B.A. is defective. Repair DVD Main C.B.A.

Communication Timing Chart 1



Communication Timing Chart 2


DVD SERIAL START
16 ms
MAX 1.5 ms
TP8002 on the DVD Main C.B.A. (H_RDY (VCR → DVD)
TP8006 on the DVD Main C.B.A. (D_RDY (DVD → VCR)
1 ms
TP8003 on the DVD Main C.B.A. (DVD_SCK (DVD → VCR)
16 15 14 13 12 11 10 9
8 7 6 5 4 3 2 1

Troubleshooting Hints of DVD Mechanism Unit

Cause: Tray Problem

Check the signal at Pin2 of CN9852 (+) on the DVD Sub C.B.A. (3.0 Vp-p)

OK → DVD Mechanism Unit is defective. Replace the DVD Mechanism Unit.

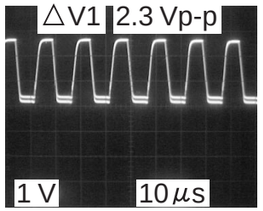
NG →

Check the signal at TP8809 (TRYIN) on the DVD Main C.B.A.

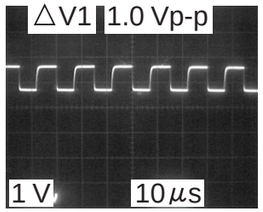
OK → IC8801 on the DVD Main C.B.A. is defective. Replace IC8801 on the DVD Main C.B.A.

NG →

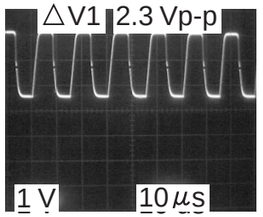
IC8001 on the DVD Main C.B.A. is defective. Replace IC8001 on the DVD Main C.B.A.



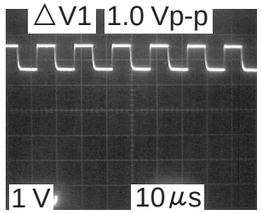
Pin2 of CN9852(+) (During Loading)



TP8809 (During Loading)



Pin2 of CN9852(+) (During Unloading)



TP8809 (During Unloading)

Cause: Spindle Motor Problem

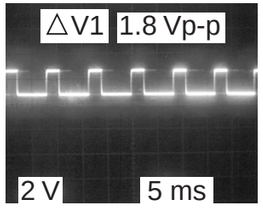
Check the signal at TP8808 (SPIN) on the DVD Main C.B.A.
NG → IC8001 on the DVD Main C.B.A. is defective. Replace IC8001 on the DVD Main C.B.A.
OK
Replace IC8801 on the DVD Main C.B.A.
Still NG
DVD Mechanism Unit is defective. Replace the DVD Mechanism Unit.

Cause: Pickup Problem

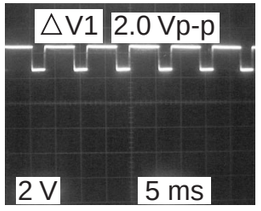
Check the voltage at TP8954 on the DVD Main C.B.A.
Is it +5.0 V ?
Check the voltage at TP8971 on the DVD Main C.B.A.
Is it +2.2 V ?
NG → Replace the IC8801 on the DVD Main C.B.A.
OK
DVD Mechanism Unit is defective. Replace the DVD Mechanism Unit.
If the Message "PLEASE CHECK THE DISC, AND FOR STAINS OR SCRATCHES ON DISC" appears.
IC8801 on the DVD Main C.B.A. is defective. Replace IC8801 on the DVD Main C.B.A.
If the Message "PLEASE CHECK THE DISC, AND FOR STAINS OR SCRATCHES ON DISC" appears.
IC8001 on the DVD Main C.B.A. is defective. Replace IC8001 on the DVD Main C.B.A.

Cause: Traverse Problem

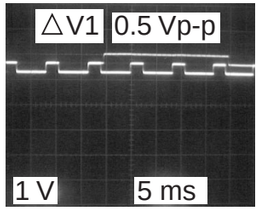
Check the signal at TP8801 and TP8802 on the DVD Main C.B.A.
OK → DVD Mechanism Unit is defective. Replace the DVD Mechanism Unit.
NG
Check the signal at TP8814 on the DVD Main C.B.A.
OK → IC8801 on the DVD Main C.B.A. is defective. Replace IC8801 on the DVD Main C.B.A.
NG
IC8001 on the DVD Main C.B.A. is defective. Replace IC8001 on the DVD Main C.B.A.



TP8801



TP8802

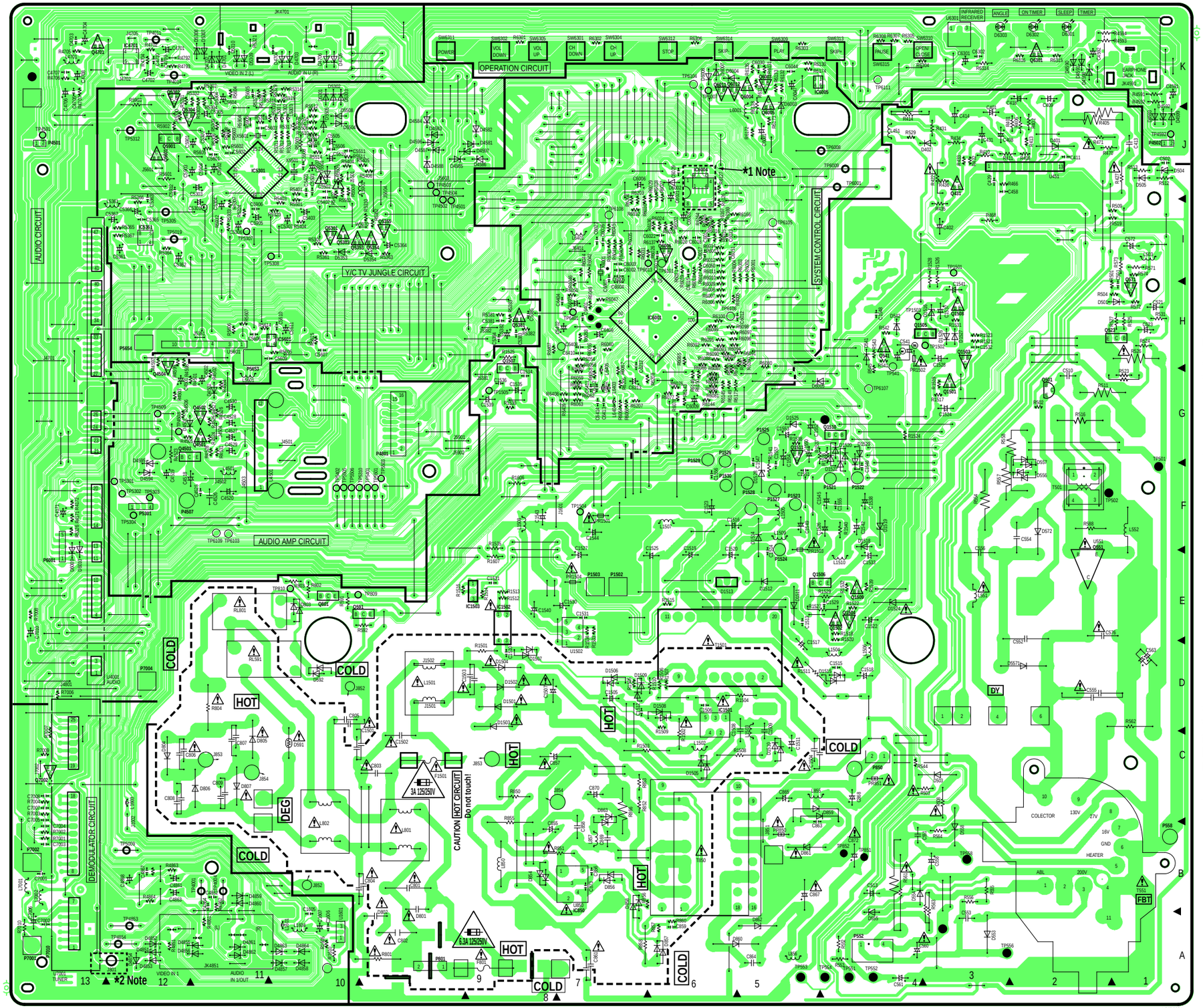


TP8814

MAIN C.B.A. LSEP2084C (A) / LSEP2084A (B)

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST FOR PROPER PARTS CONTENT.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.



HOT CIRCUIT. BE CAREFUL AND USE AN ISOLATION TRANSFORMER WHEN SERVICING.

LSJB2084

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-20D53	A
PV-27D53	B

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE 3A 125V/250V FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES
D' INCENDIE N' UTILISERQUE DES FUSIBLE DE MÉME
TYPE 3A 125V/250V

3A 125V/250V

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE 6.3A 125V/250V FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES
D' INCENDIE N' UTILISERQUE DES FUSIBLE DE MÉME
TYPE 6.3A 125V/250V

6.3A 125V/250V

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE
SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,
USE ONLY THE SPECIFIED PARTS.

*1 Note

There are 2 types of EEPROM IC (IC6004) used on the Main C.B.A. (DIP TYPE and SOP TYPE) However, these are same reliability.

Fig. 1

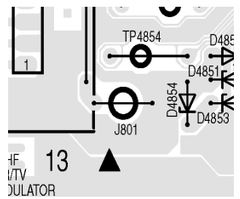
OR

Fig. 2

Be sure to install DIP type IC from the component side as shown in Fig. 1.
Be sure to intall SOP type IC from the foil side as shown in Fig. 2.

*2 Note

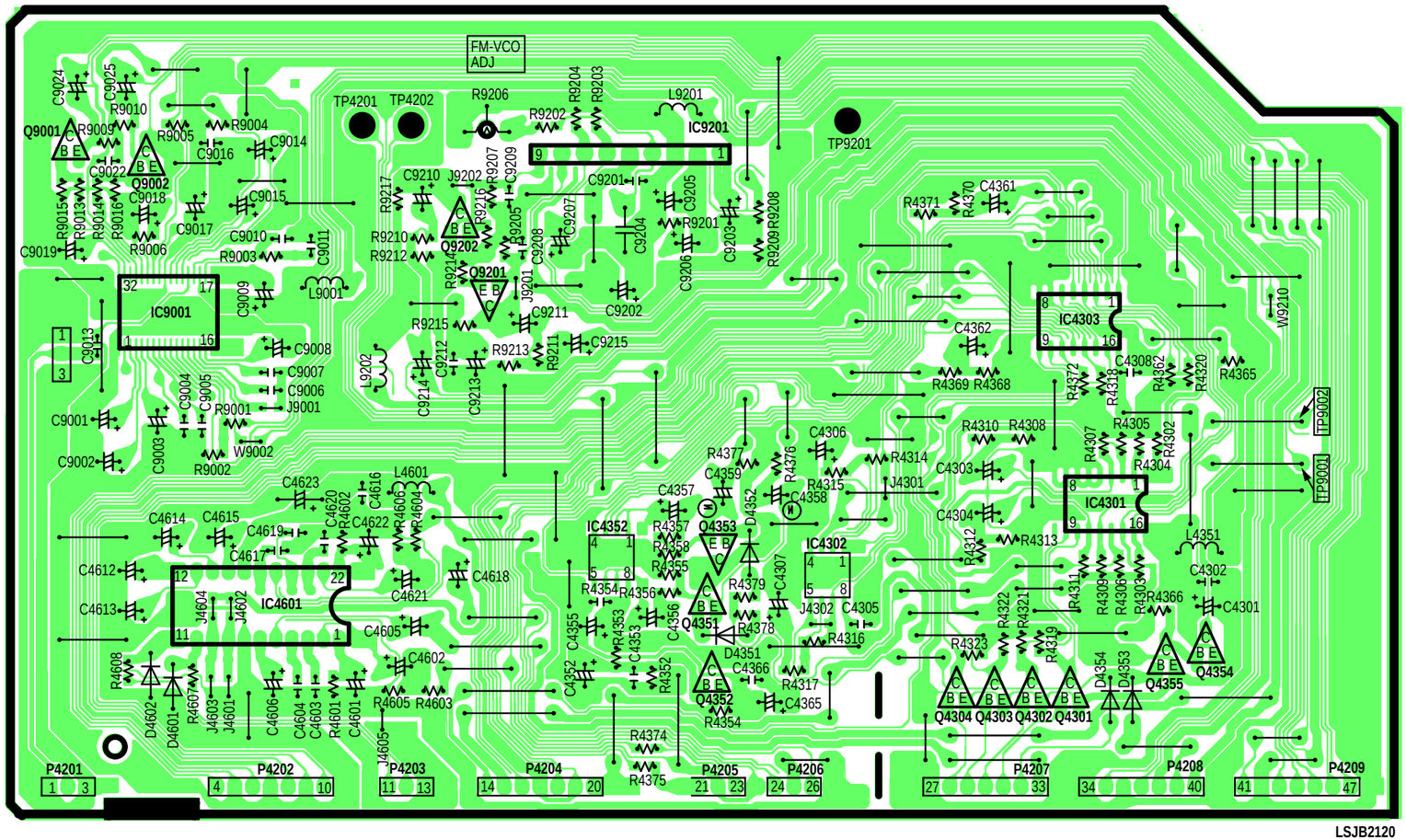
When the MAIN C.B.A. is replaced,
the Jumper wire(J801 or J810) of the new
MAIN C.B.A. must be cut before use.
If the Jumper wire isn't cut, the power does
not turned on to the TV circuit.
As for the location of the Jumper wire, please
refer the following figure.



NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST FOR PROPER PARTS CONTENT.

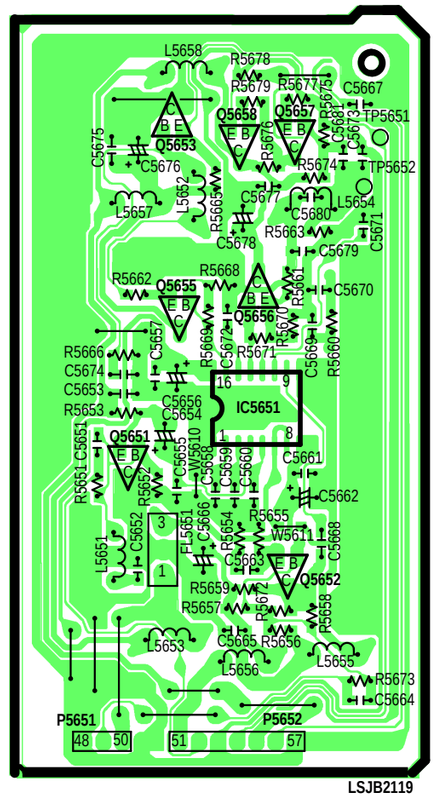
NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

AUDIO C.B.A. LSEP2120A



LSJB2120

Y/C SEPARATION C.B.A. LSEP2119A



LSJB2119

AUDIO C.B.A. LSEP2120A
Y/C SEPARATION C.B.A. LSEP2119A
PV-20D53/PV-27D53

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST FOR PROPER PARTS CONTENT.

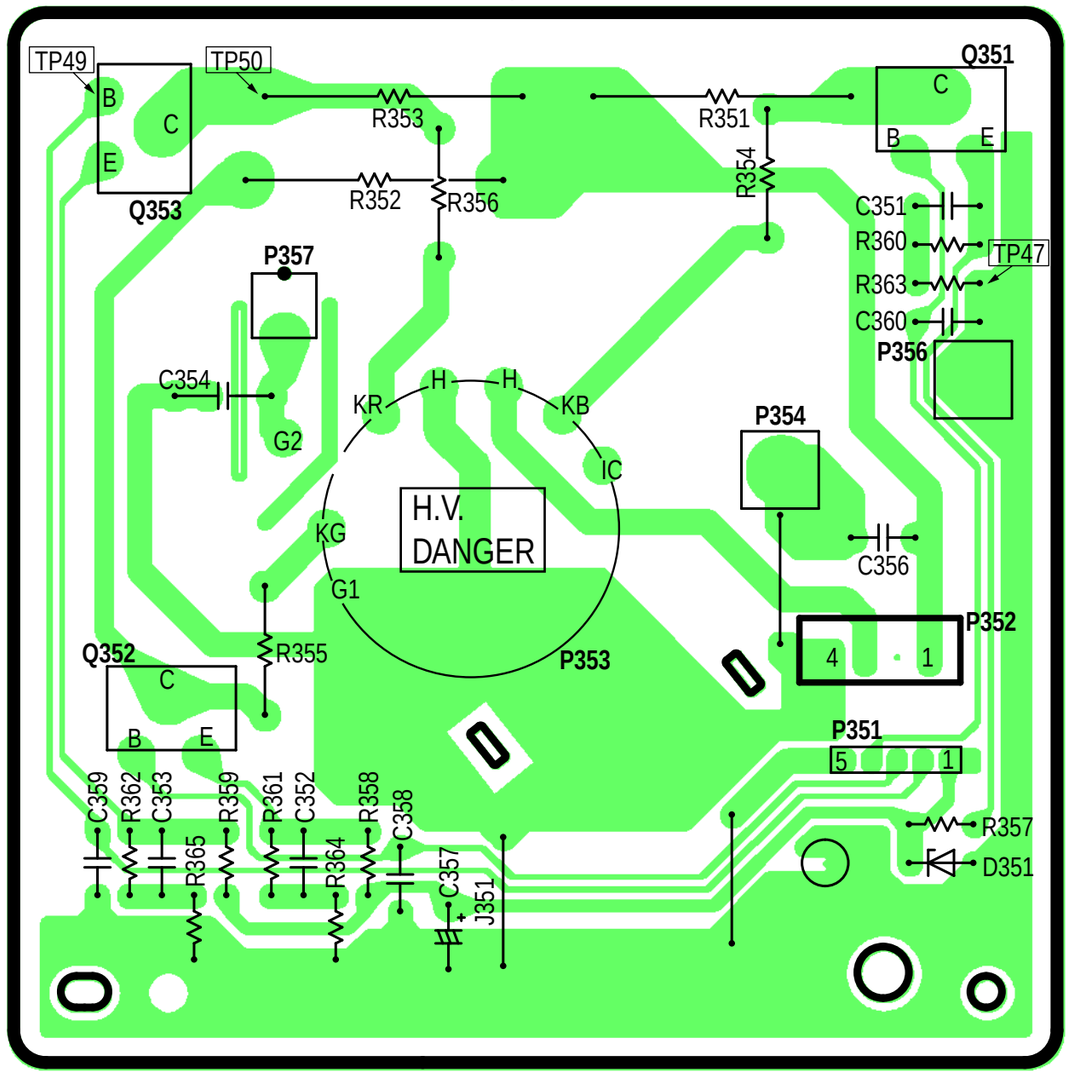
NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-20D53	A
PV-27D53	B

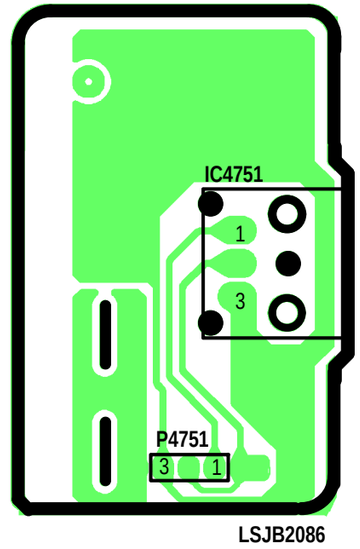
CRT C.B.A. LRP63022X (A) / LRP63022S (B)

CAUTION: WHEN SERVICING THIS C.B.A., AVOID TOUCHING HIGH VOLTAGE COMPONENTS.



LRP63022

OPTICAL AUDIO JACK C.B.A. LSEP2086A



LSJB2086

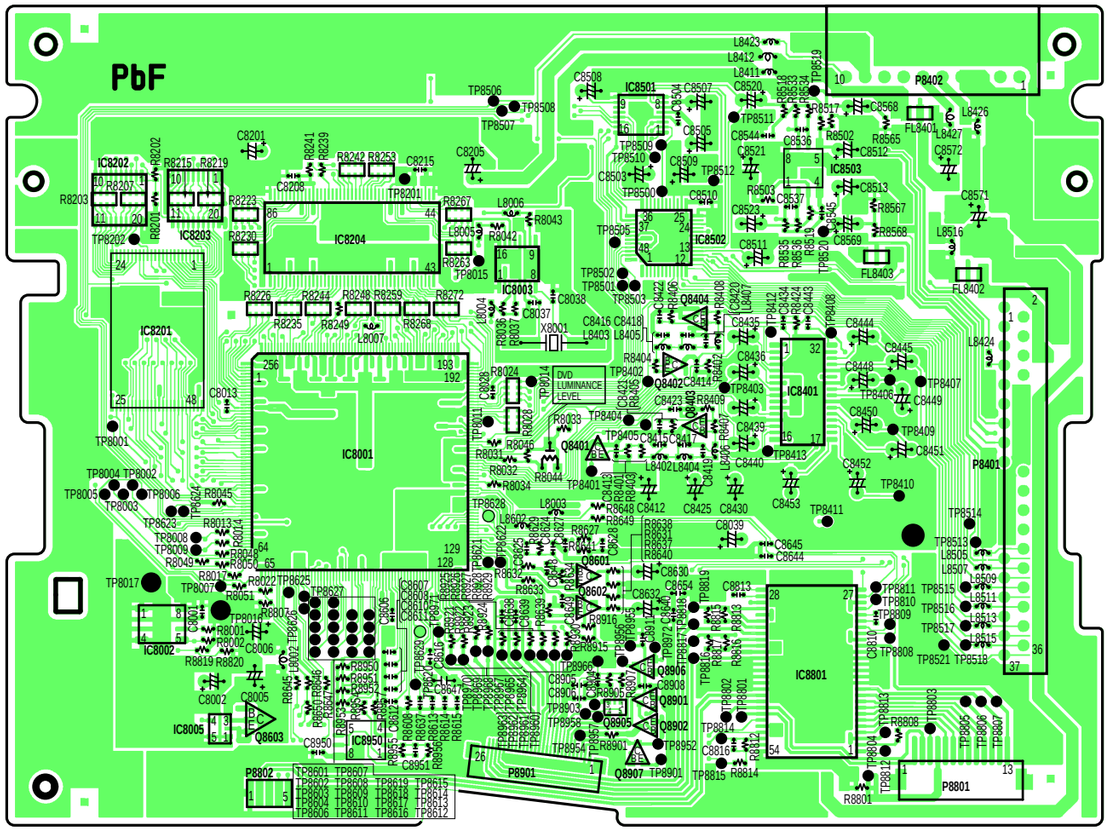
DVD MAIN C.B.A. LSEP2091A1

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
CIRCUIT BOARD LAYOUT SHOWS COMPONENTS INSTALLED FOR VARIOUS MODELS.
FOR PROPER PARTS CONTENT FOR THE MODEL YOU ARE SERVICING,
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST.

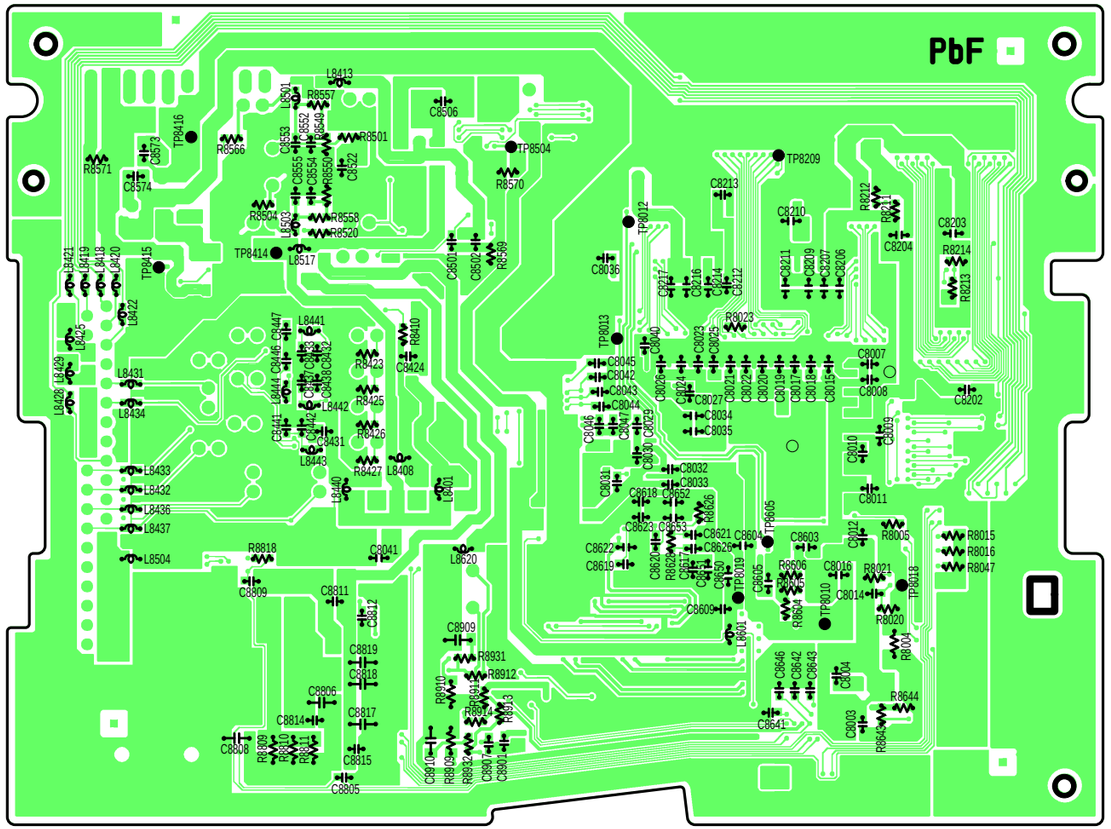
NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.

(COMPONENT SIDE)



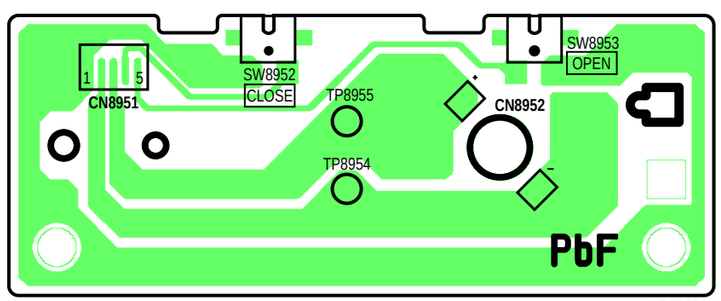
LSJB2091

(FOIL SIDE)



LSJB2091

DVD SUB C.B.A. LSEP2014A



LSJB2014

NOTE:
CIRCUIT BOARD LAYOUT SHOWS COMPONENTS INSTALLED FOR VARIOUS MODELS.
FOR PROPER PARTS CONTENT FOR THE MODEL YOU ARE SERVICING,
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST.

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.

1. **Important safety notice**
   Components identified by the sign ⚠ have special characteristics important for safety. When replacing any of these components. Use only the specified parts.

2. Do not use the part number shown on this drawing for ordering.
   The correct part number and part value is shown in the parts list, and may be slightly different or amended since this drawing was prepared.

3. Use only original replacement parts:
   To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list section of the service manual.

4. Parts different in shape or size may be used.
   However, only interchangeable parts will be supplied as service replacement parts.

5. Test point information
   ⓘ :Test point with a jumper wire across a hole in P.C.B.
   ▭→ :Test point with a component lead on the foil side.
   ⊘ :Test point with no test pin.
   ● :Test point with a test pin.

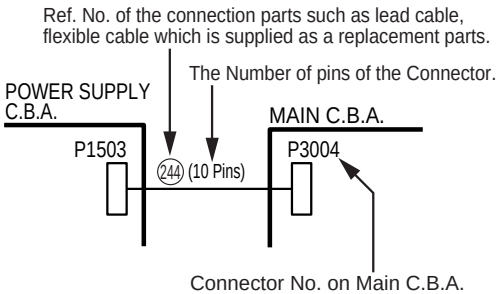
Schematic Diagram Notes

1. Indication for Zener Voltage of Zener Diodes
   The Zener Voltage of Zener Diodes are indicated as such on Schematic Diagrams.

   Example:
   (6.2V).....Zener Voltage

2. How to identify Connectors
   Each connector is labeled with a Connector No. and Pin No. Indicating what it is connected to,
   in other words, its counter part.
   Use the interconnection schematic diagram to find the connection between associated connectors.

   Example:
   The connections between C.B.A.s are shown below.


Ref. No. of the connection parts such as lead cable, flexible cable which is supplied as a replacement parts.
The Number of pins of the Connector.
POWER SUPPLY C.B.A.
MAIN C.B.A.
P1503
244 (10 Pins)
P3004
Connector No. on Main C.B.A.

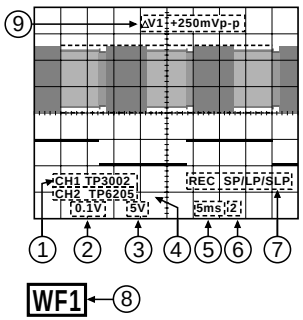
3. Parts marked "PT" are not used in any models included in this service model.

   Example: C6011 100P PT | C6011 PT | R6097 PT

4. Jumper wires are used for WA10, WA5 etc and these are not supplied as replacement parts.

Signal Waveform Note

How to read Signal Waveform



① Connecting Point
② Volts/Div
③ Volts/Div
④ Connecting Point
⑤ Time/Div
⑥ Trigger Channel of the scope
(1:CH1,2:CH2)
⑦ Operation Mode of VCR
⑧ Waveform Point on Schematic
⑨ ΔV1:Peak to Peak

Voltage Chart Note

Voltage Measurement
a. Color bar signal in SP mode.
b. ---:Unmeasurable or not necessary to measure.

Circuit Board Layout Note

Circuit Board Layout shows components installed for various models.
For proper parts content for the model you are servicing, please refer to the schematic diagram and parts list.

NOTE:
Circuit Board Layout includes components which are not used.

Model No. Identification Mark

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-20D53	A
PV-27D53	B
Not Used	PT

Note : Refer to item 3 of Schematic Diagram Notes for mark "PT".

MAIN I SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-20D53	A
PV-27D53	B
Not Used	PT

KEY VOLTAGE CHART (SW6301,6302,6304,6305,6309~6315)

TERMINAL VOLTAGE	0V～0.6V	0.7V～1.8V	1.9V～3.0V	3.1V～4.4V
KEY DATA0 (PIN 89)	CH DOWN	VOLUME DOWN	-----	-----
KEY DATA1 (PIN 88)	CH UP	VOLUME UP	-----	-----
KEY DATA2 (PIN 87)	-----	-----	-----	DVD PLAY
KEY DATA3 (PIN 86)	-----	OPEN /CLOSE	POWER	DVD STOP
KEY DATA4 (PIN 85)	SKIP +	SKIP -	DVD PAUSE/STILL	-----

LINK TO VOLTAGE CHART

LSJB2084
MAIN I SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

I/O CHART OF IC6001

Pin No.	I/O	Signal Name	Description
1	I	P_DOWN_L	POWER DOWN(L)
2	O	F_LINE2/R_LINE1	LINE2(H)/LINE1(L)
3	O	H_READY_L	HOST READY(L)
4	I	D_READY_L	DVD READY(L)
5	I	IR-DATA	IR-DATA
6	O	DEFEAT_H	AUDIO DEFEAT(H)
7	O	A_MUTE_H	AUDIO MUTE(H)
8	I	IIC_SVC_L	I2C SERVICE MODE(L)
9	-	M_TNR_H/LINE&DVD_L	(Not used)
10	O	A_CTL_C	FM RADIO&TUNER AUDIO(H)
11	I	D_SCK	DVD SERIAL CLOCK
12	I	D_DATA_IN	DVD SERIAL DATA 1
13	O	H_DATA_OUT	DVD SERIAL DATA 0
14	O	SCK	SERIAL CLOCK
15	-	L	(Not used)
16	O	DATA_OUT	SERIAL DATA 0
17	I/O	IIC_DATA	I2C SERIAL DATA
18	O	IIC_CLK	I2C SERIAL CLOCK
19	I/O	BEEPER	BEEPER
20	O	SAP/MAIN	SAP(H)/MAIN(L)
21	O	MONO/MTS	MONO(H)/STEREO(L)
22	-	L	(Not used)
23	-	NC	(Not used)
24	-	NC	(Not used)
25	I	RST	RESET(L)
26	O	3.58MHz/L	3.58MHz
27	-	NC	(Not used)
28	O	POWER_ON_H	POWER ON(H)
29	-	3L_RST_L	(Not used)
30	I	LINE_SD_L	TV SIGNAL(L)
31	O	V_MUTE_2_L	VIDEO MUTE2(L)
32	O	LINE_H/TNR_L	LINE(H)/TUNER(L)
33	-	L	(Not used)
34	-	L	(Not used)
35	O	SP_MUTE_H	AUDIO AMP MUTE(H)
36	I	DVDD	VDD (+5V)
37	O	OSC_OUT	OSC 2
38	I	OSC_IN	OSC 1
39	-	DVSS	Ground
40	O	TNR_CE_H	TUNER CHIP ENABLE(H)
41	I	TNR_LOCK_L	TUNER LOCK SIGNAL(L)
42	-	SXI	(Not used)
43	I/O	FM_RAD_F_MONO_H/NOR_I	FM MONO(H)
44	O	TV_P_ON_H	TV POWER ON(H)
45	I	OSD_V	V-SYNC
46	I	OSD_H	H-SYNC
47	-	DEGAUSS_H	(Not used)
48	-	VSS2_OSD	Ground
49	I	XDS	VIDEO
50	I	CV_IN2	SYNC

Pin No.	I/O	Signal Name	Description
51	I	VDD2_OSD	VDD (+5V)
52	I	AFC_C	AFC
53	O	AFC_LPF	AFC
54	O	FM_RAD_H	FM RADIO(H)/TV(L)
55	-	FSC_LPF	(Not used)
56	I	FM_RAD_STE_L	FM RADIO STEREO(L)/MONO(H)
57	I	FM_RAD_SD_L	FM RADIO SIGNAL(L)
58	O	DVD_H	DVD(H)
59	O	BLK_H	OSD BLANKING PULSE
60	O	A_DVD_H	AUDIO DVD(H)
61	O	R	OSD-R
62	O	G	OSD-G
63	O	B	OSD-B
64	O	V_MUTE_H	VIDEO MUTE1(H)
65	-	NC	(Not used)
66	I	TNR_SD_L	TUNER SIGNAL(L))
67	-	NC	(Not used)
68	-	NC	(Not used)
69	-	NC	(Not used)
70	-	NC	(Not used)
71	-	AVSS	Ground
72	-	NC	(Not used)
73	I	AVDD	VDD (+5V)
74	-	NC	(Not used)
75	-	NC	(Not used)
76	-	NC	(Not used)
77	I	COS/PANA_OPT	SWITCHING TERMINAL OPTION (COS(H)/PANA(L))
78	I	DTS_AFC	AFC
79	I	OVER_CUR_H	OVER CURRENT(H)
80	I	M_SVC_L	SERVICE(L)
81	O	A_CTL_B	LINE1&LINE2(H)
82	O	A_CTL_A	LINE2(H)
83	-	L	(Not used)
84	-	L	(Not used)
85	I	KEY_IN_4	KEY DATA 4
86	I	KEY_IN_3	KEY DATA 3
87	I	KEY_IN_2	KEY DATA 2
88	I	KEY_IN_1	KEY DATA 1
89	I	KEY_IN_0	KEY DATA0
90	O	ANGLE_LED	ANGLE LED ON(L)
91	O	ON_T_LED	ON-TIMER LED ON(L)
92	O	SLEEP_LED	SLEEP LED ON(L)
93	I	SAP_IN_L	SAP SIGNAL(L)
94	I	MTS_IN_L	MTS SIGNAL(L)
95	O	A_CTL_D	FM RADIO(H)/BEEPER(L)
96	-	S2_IN_L	(Not used)
97	-	S1_IN_L	(Not used)
98	O	D_RST_L	DVD RESET(L)
99	-	L	(Not used)
100	O	VCH_MUTE_H	V-CHIP MUTE(H)

MAIN II SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

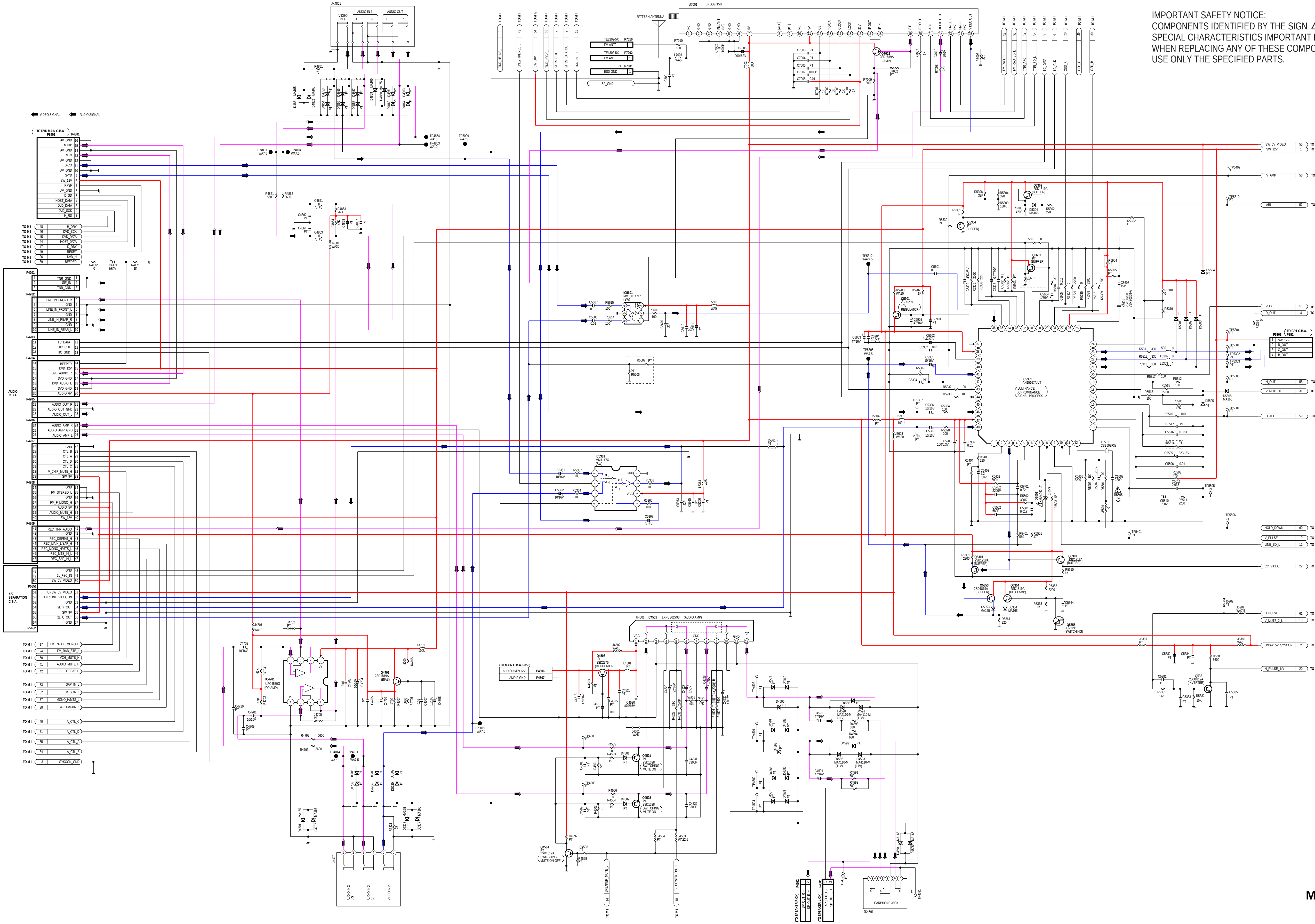
NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-20D53	A
PV-27D53	B
Not Used	PT

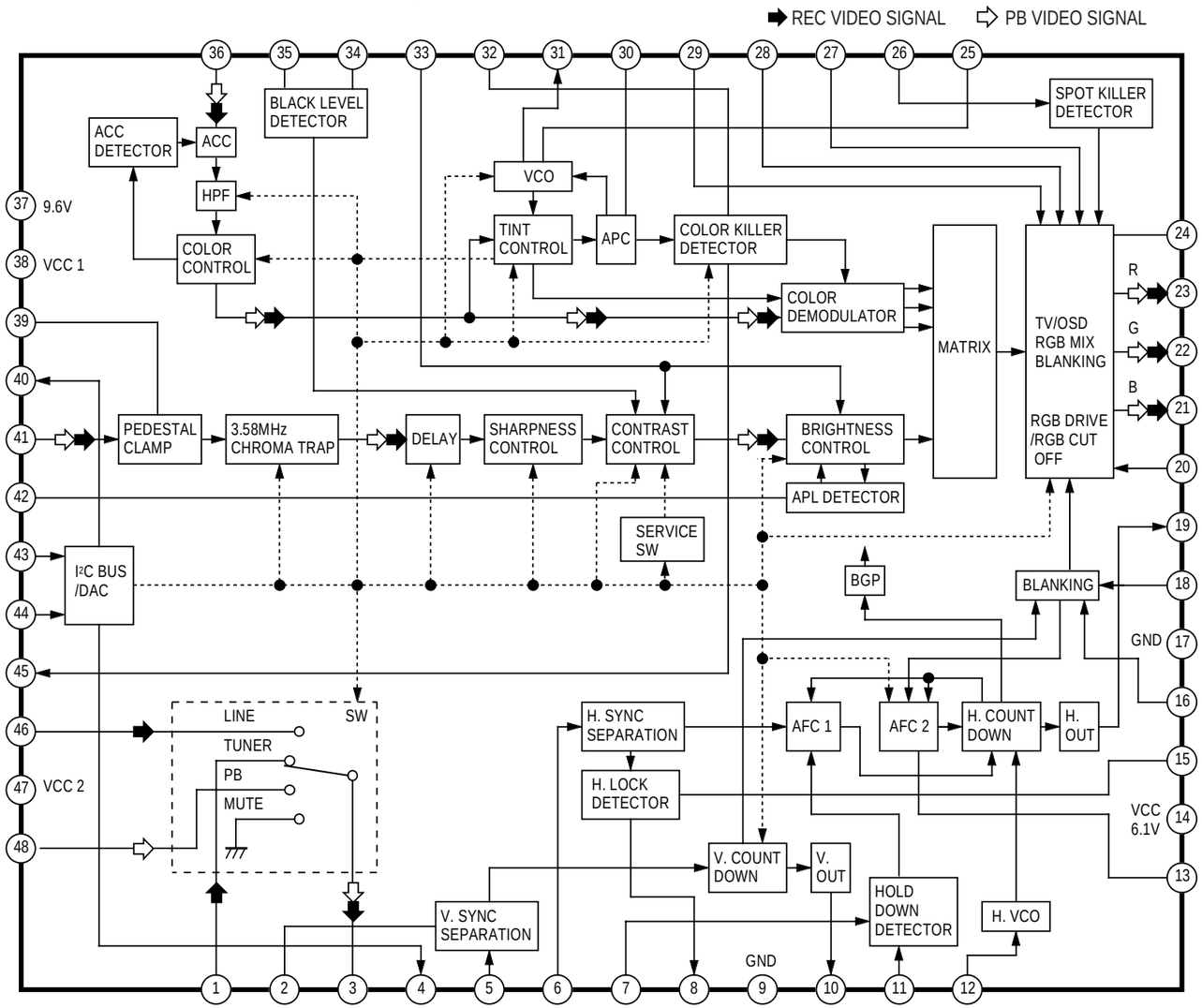


VIDEO SIGNAL
AUDIO SIGNAL
JK4851
VIDEO IN 1
AUDIO IN 1
AUDIO OUT
TO DVD MAIN C.B.A P8401
P4801
AUDIO C.B.A.
Y/C SEPARATION C.B.A.
U7001 ENG36715G
PATTERN ANTENNA
Q7002 2SD1819A (AMP)
IC5601 MM1501XNRE (SW)
IC5361 MM1117X (SW)
IC5301 AN15167A-VT (LUMINANCE /CHROMINANCE SIGNAL PROCESS)
Q5901 2SD2259 (+9V REGULATOR)
Q5302 2SD1819A (BUFFER)
Q5304 PT (BUFFER)
Q5601 PT (BUFFER)
Q5301 2SB1218A (BUFFER)
Q5303 2SD1819A (BUFFER)
Q5353 2SD1819A (BUFFER)
Q5354 2SD1819A (DC CLAMP)
Q5355 UN2211 (SWITCHING)
Q5381 2SD1819A (INVERTER)
P5301 (TO CRT C.B.A. P351)
IC4701 UPC4570G (OP AMP)
Q4701 2SD1819A (BIAS)
JK4701
AUDIO IN 2 (R)
AUDIO IN 2 (L)
VIDEO IN 2
U4501 IC4501 LXPUS02793 (AUDIO AMP)
(TO MAIN C.B.A. P850)
AUDIO AMP+12V P4506
AMP P GND P4507
Q4503 PT 2SD2375 (REGULATOR)
Q4501 PT 2SD1328 (SWITCHING MUTE ON)
Q4502 PT 2SD1328 (SWITCHING MUTE ON)
Q4504 PT 2SD1819A (SWITCHING MUTE ON-OFF)
(TO SPEAKER R CH) P4502
(TO SPEAKER L CH) P4501
EARPHONE JACK
JK4591

LINK TO VOLTAGE CHART

LSJB2084
MAIN II SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

IC5301 LUMINANCE/CHROMINANCE PROCESS IC- DETAIL BLOCK DIAGRAM



MAIN III SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

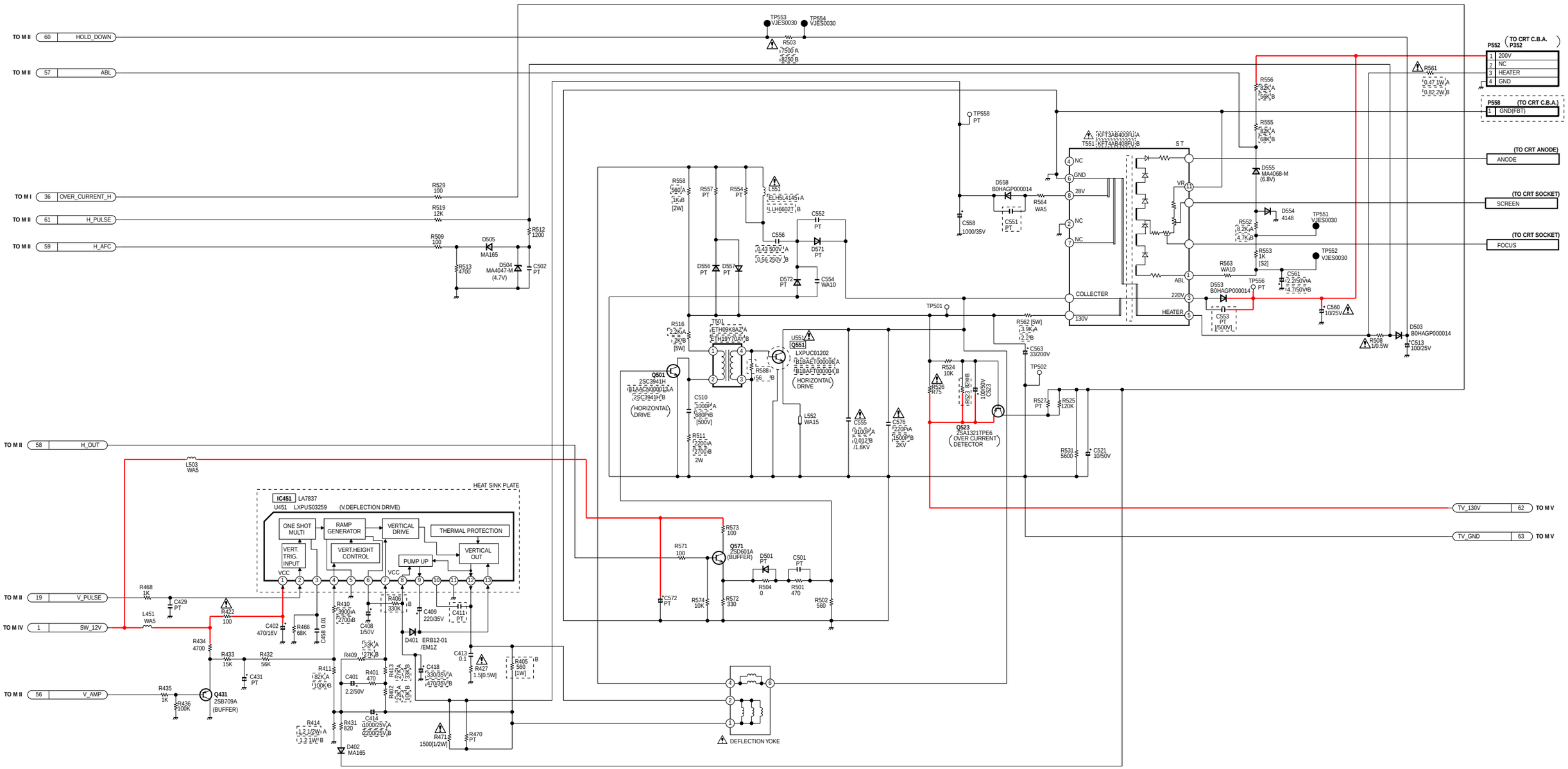
NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-20D53	A
PV-27D53	B
Not Used	PT



LINK TO VOLTAGE CHART

LSJB2084
MAIN III SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

MAIN IV / OPTICAL AUDIO JACK SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

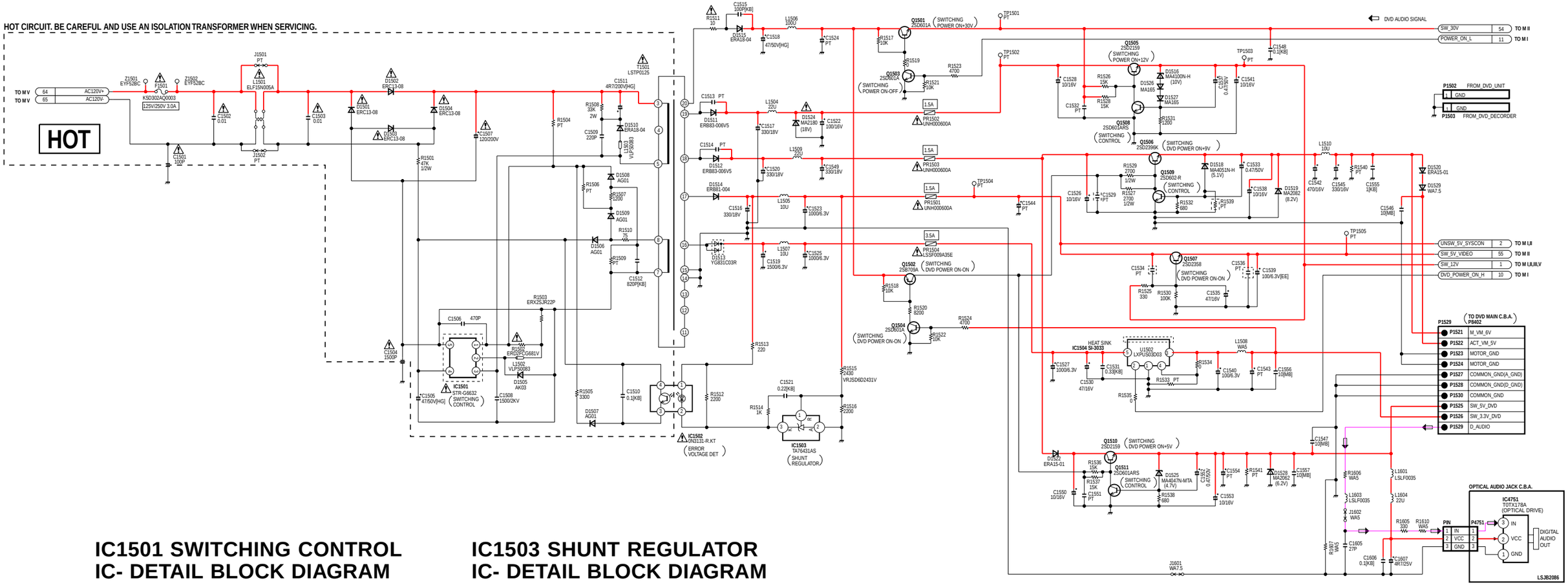
COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-20D53	A
PV-27D53	B
Not Used	PT

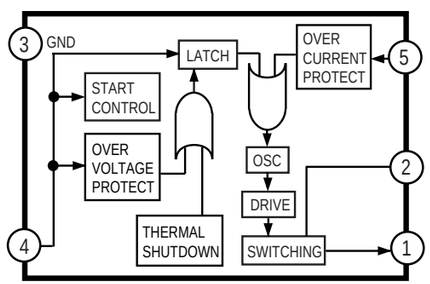
CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE 3A 125V/250V FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES D' INCENDIE N' UTILISERQUE DES FUSIBLE DE MÉME TYPE 3A 125V/250V

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

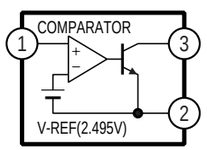
HOT CIRCUIT. BE CAREFUL AND USE AN ISOLATION TRANSFORMER WHEN SERVICING.



IC1501 SWITCHING CONTROL IC- DETAIL BLOCK DIAGRAM



IC1503 SHUNT REGULATOR IC- DETAIL BLOCK DIAGRAM



LINK TO VOLTAGE CHART

LSJB2084/LSJB2086
MAIN IV / OPTICAL AUDIO JACK SCHEMATIC DIAGRAM
PV-20D53/PV-27D53

MAIN V SCHEMATIC DIAGRAM

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.

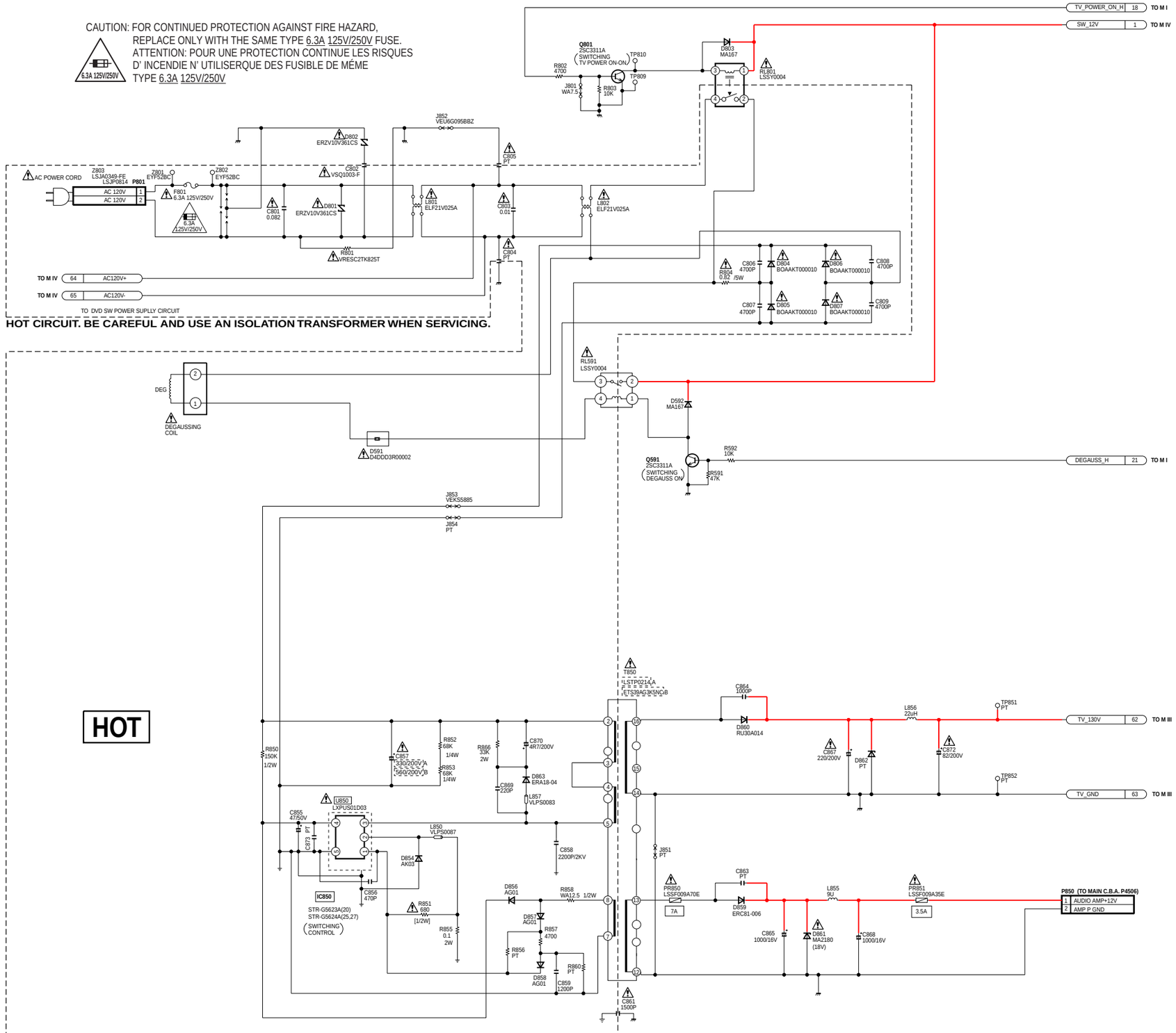
NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

COMPARISON CHART OF MODELS & MARKS

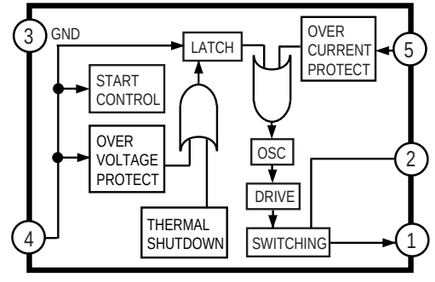
MODEL	MARK
PV-20D53	A
PV-27D53	B
Not Used	PT

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE 6.3A 125V/250V FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES D' INCENDIE N' UTILISERQUE DES FUSIBLE DE MÉME TYPE 6.3A 125V/250V

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.



IC850 SWITCHING CONTROL IC- DETAIL BLOCK DIAGRAM



LINK TO VOLTAGE CHART

LSJB2084
MAIN V SCHEMATIC DIAGRAM
PV-20D53/PV-27D53